### NEW INDO-AUSTRALIAN GEOMETRIDAE.

By LOUIS B. PROUT, F.E.S.

#### SUBFAMILY OENOCHROMINAE

#### 1. Ozola sinuicosta grisescens subsp. nov.

Differs from the name-type (Prout, Gen. Ins., fasc. 104, p. 94) in having the ground-colour grey, not fleshy-ochreous, the markings also less brightly ferruginous.

Sikkim, 8 & & , 4 ? ?, in coll. Tring Mus. Also in other collections.

#### 2. Ozola auranticeps spec. nov.

3,41-44 mm. Head bright orange, the face and palpus mixed with red and blackish. Collar and front of thorax bright orange. Body otherwise dirty ochreous-whitish, mottled with dark grey; abdomen strongly elongate, anteriorly with slight ochreous dorsal belts.

Forewing elongate, shaped nearly as in macariata Walk.  $\delta$ , the apex appearing at first glance more falcate on account of a patch of white fringe from close to apex to the gibbosity at  $R^2$ ; colour and markings recalling those of atrofasciata Pagenst., but the ground-colour whiter, irroration coarser and less regularly distributed, markings rather more blackish; costal margin more heavily spotted and strigulated than in that species, the incomplete antemedian line thicker, more strongly bent in cell, discal dot larger, connected with costa by some dark shading, a pair of spots (sometimes confluent) behind the proximal part of  $M^2$ , dark border less smoothly bounded proximally, the ground-colour encroaching for some distance along costa and slightly near hindmargin.——Hindwing more heavily dotted and spotted than in atrofasciata, the ground-colour slightly projecting into the black border in the middle.

Underside the same.

Kalewara, Central Celebes, February 5, 1913 (Dr. Martin). 233 in coll. Tring Mus.

A very fine species.

# 3. Celerena lerne amplimargo subsp. nov.

Both wings with the black border considerably broadened, that of the forewing (except in undersized specimens) measuring 17-19 mm. at costa; the contained white bands broadened, usually very much broadened, sometimes showing some yellow shading in their proximal part.

S. and S.E. Dutch New Guinea: Oetakwa River district (Snow Mountains) and Ellanden River. Type 3, near Oetakwa River, up to 3500 ft., October—December 1910 (A. S. Meek), in coll. Tring Mus.

The species was described from Dorei, and occurs in the typical form from Misol to Humboldt Bay.

#### 4. Celerena cana Warr.

This species occurs in three well-defined races. The only example before me from Goodenough Island is a ? in rather poor condition, apparently intermediate between the Fergusson Island and the Biagi form; further material is needed before anything definite can be said of it.

C. cana cana Warr. In amplification of Warren's description (Nov. Zool. iii. 281), it is necessary to notice that the black spot proximally to midcosta is very small and narrow and ends in a point midway between SC and cell-fold, that the yellow fascia beyond the curved grey one is 2 to 3 mm. in width, sometimes broader anteriorly, that the ground-colour is more whitish in the posterior part of both wings from base to beyond middle, and that the marginal fascia of hindwing is narrow. The wing-expanse given by Warren must have been estimated, not measured; it is 56-58 mm., not 60 mm.

Fergusson Island.

**C. cana nigrilinea** subsp. nov., 58-62 mm. Costal spot of forewing larger, almost or quite reaching cell-fold, a black line on the curved grey fascia from costa to R<sup>3</sup> or M<sup>1</sup>; the yellow fascia beyond reduced to about 1 mm. width, or wanting; posterior part of both wings coloured as in *cana cana*; marginal fascia of hindwing less narrow.

Biagi, Mambare River, 5000 ft., January 1906 (A. S. Meek); Upper Aroa River, March and April 1903 (A. S. Meek); Aroa River, 4000-5000 ft., May 1905 (A. S. Meek). Type, Biagi, in coll. Tring Mus.

**C.** cana fulvastra subsp. nov. Smaller than the other races (48-53 mm.), rather deeper yellow, uniform, not becoming whitish at hindmargins; basal costal streak narrowed; black costal spot about as in cana nigrilinea, occasionally rather swollen; curved grey fascia slightly darkened but without defined black costal spot or line; yellow fascia beyond about as in c. nigrilinea; marginal fascia of hindwing as in c. cana.

Humboldt Bay, September—October 1892 (W. Doherty). 3 & d, 4 ? ?, in coll. Tring Mus.

#### SUBFAMILY HEMITHEINAE

# 5. Archaeobalbis urapteraria eudicheres subsp. nov.

3,50 mm. Smaller than urapteraria urapteraria Walk., from Borneo, and with the 3 hindwing in general not quite so long and narrow. Upperside showing little difference, though with rather more black scales in the red shades distally to the postmedian. Both wings beneath with the proximal part clear bright orange as in u. urapteraria, a black band of 3 or 4 mm. width (narrowing anteriorly on forewing and posteriorly on hindwing) separating this from the reddish-distal area and throwing out some irregular black vein-streaks into the latter.

Mount Gede, W. Java, 4000 m., 1896 (H. Fruhstorfer). Type in coll. Tring Mus. The ♀ has the black shades suffusing almost the entire distal area beneath.

The new form, or something extremely similar (perhaps further subdivisible when more and better material is available), occurs also on Nias, Penang and Bunguran, Natuna Islands, so that it would appear to be the phylogenetic "type," from which a specialised race (u. urapteraria) has arisen in the mountains of

N. Borneo. Perhaps *viridaria* Moore, from N. India, is another race of the same collective species, as it differs in little except the broader wings and duller, more black-mottled undersurface.

# 6. Epipristis nelearia viridans subsp. nov.

Both wings above more strongly and uniformly suffused with greenish than in the name-type, the black lines fine, not very intense, very regular, not intensified towards costal margin of forewing. Dark border beneath not very broad, smoothly margined, recalling rufilunata Warr. (Nov. Zool. x. 352), which is also an Epipristis.

Lower Aroa River, British New Guinea, November 1904—March 1905 (A. S. Meek). 2 ?? in coll. Tring Mus.

#### 7. Pingasa lariaria manilensis subsp. nov.

\$\forall \text{, 48 mm.}\$ Smaller than lariaria lariaria Walk., relatively rather broader winged, with stronger admixture of red scales; antemedian line of forewing less deeply dentate, postmedian of both wings with the teeth not quite so ample; underside with the yellow proximal shading somewhat restricted, the black distal border slightly less broad than in the name-type.

Philippines. Type (near Manila, J. Whitehead) in coll. Tring Mus.

Possibly a separate species. Just before going to press, I have seen a & from Mindanao, in coll. Joicey, slightly smaller, but quite corresponding.

# 8. Pingasa pseudoterpnaria gracilis Prout

In describing this race I omitted to mention that the  $\delta$  genitalia have been examined and agree with those of *pseudoterpnaria tephrosiaria*, which is undoubtedly conspecific with the Japanese name-type.

# 9. Pingasa elutriata spec. nov.

Much larger than dispensata Walk., from S. India (size of chlora crenaria Guen.), face with the black band of upper part narrowed, both wings with postmedian line less sharply black-marked on the teeth, underside with the submarginal band much paler, more brownish, on the forewing threadlike or almost obsolete from R<sup>3</sup> posteriorly, on the hindwing very narrow, generally of almost equal width throughout, occasionally almost interrupted between R<sup>3</sup> and M<sup>1</sup>.

Darjiling, type ♂ and others; Assam, 1 ♂; in coll. Tring Mus.

I at first regarded this as a subspecies of dispensata, but the genitalia appear very distinct—valvae larger and more deeply emarginate, etc.

# 10. Pingasa blanda (Pagenst.)

Pseudoterpna blanda Pagenst., Zoologica xii. (29), 151 (1900) (Bismarck Archipelago). Pingasa acutangula Warr., Nov. Zool. x. 352 (1903) (New Guinea).

The above synonymy has been overlooked, specimens from the Bismarck Archipelago having apparently not reached this country. But Pagenstecher's description leaves no doubt of the identity, and I have before me a fine series of Warren's acutangula from Little Kei, most parts of New Guinea, Goodenough Island, and Rook Island, so that its range in the Papuan subregion is evidently

fairly extensive. From Rook Island, three of the examples belong to a very noteworthy aberration, ab depleta nov., with all the dark colour obsolete, replaced by very pale blue-grey. As the breast and forecoxa are more ochreous, the olivaceous dusting of both wings somewhat stronger, the cell-mark of the forewing perhaps slightly narrower than usual, and the postmedian line of the hindwing slightly more angled outward on M<sup>2</sup> than usual (forming a more regular and deeper inward curve between this vein and the abdominal margin), it is not inconceivable that the impression of a distinct species, which is produced at first glance, may not prove fallacious; yet the distinctions, apart from the coloration, are exceedingly slight and not quite constant.

# 11. Pingasa ruginaria andamanica subsp. nov.

Ground-colour as in the most deeply coloured aberrations of ruginaria ruginaria: distal area more deeply and uniformly rufous, the pale subterminal line more or less obliterated, only with traces remaining here and there, chiefly at the costal and hindmargins.

Andaman Islands. Type from Port Blair, in coll. L. B. Prout.

# 12. Hypodoxa emiliaria aignanensis subsp. nov.

3 \( \). Nearest to emiliaria purpurifera Warr., from the Solomons, the 3 above more suffused with blackish (in e. purpurifera more olivaceous), the \( \frac{2}{3} \) with reddish, both sexes beneath with the cell-spot of the forewing somewhat reduced, that of the hindwing wanting, the black borders—at least that of the hindwing—slightly narrowed, not or scarcely angulated in the middle.

St. Aignan, Louisiades, September—November 1897 (A. S. Meek). Type in coll. Tring Mus.

# 13. Dysphania pilosa gloriosa subsp. nov.

3, 110 mm. Forewing with the very large cell-spot preceded in cell by a moderately broad (7 mm.) white band, which continues more irregularly (usually narrowing) almost to hindmargin, its proximal edge more or less strongly and irregularly dentate; in addition, a very narrow, interrupted white edging distally to the cell-spot, its posterior extremity confluent with the white band, and remnants of a very narrow, strongly sinuous outer band, showing chiefly as a pair of lunulate spots between SC<sup>5</sup> and R<sup>2</sup>, a smaller, more distal spot or dot in front of R<sup>3</sup> and a slender streak from behind M<sup>1</sup> almost to hindmargin.—Hindwing with a corresponding white discal band, the orange submarginal band about as in average females of name-typical pilosa.

\$\, 100\text{-114 mm}\$. Forewing with all the white markings considerably broader than in the \$\delta\$, the outer band only interrupted about M\dagger, fleshy-tinted at posterior end; usually in addition some white spots near base.\to Hindwing with the white and orange bands considerably widened.

Vella Lavella, Solomons, February—March 1906 (A. S. Meek). 4 & &, 5 ? ?, in coll. Tring Mus.

As the ground-colour is rather more blue (less purple) than in the other races, this may possibly be a separate species, but it is in large measure connected with the name-type by the  $\mathcal{F}$  of subsp. *flavicorpus* Warr. from Choiseul, the  $\mathcal{F}$  of which

differs little from the name-type. D. regnatrix Warr., from Kulambangra, and imperatrix Warr., from Isabel, each unfortunately founded on a unique ?, are also evidently races, if not aberrations, of this variable species.

# 14. Dysphania minervaria latigrisea subsp. nov.

\$\foats, 72 mm. Smaller than name-typical minervaria Guen. from Burma.—Forewing without yellow patch on hindmargin, merely with a few yellow scales proximally and distally to the postmedian band.—Hindwing anteriorly grey (concolorous with forewing), this shade reaching abdominal margin at base, then posteriorly limited by M as far as the discal spot, by R<sup>2</sup> to the postmedian band, and by SC<sup>2</sup> to the marginal spots, containing between postmedian and marginal a small yellow spot.

Penang, December 1901 (Curtis). Type in coll. Tring Mus.

# 15. Dysphania militaris alloïdes subsp. nov.

& \( \varphi \), 66-70 mm. Considerably smaller than militaris militaris L., the yellow colour less bright, the black markings mostly considerably broadened. In detail, the principal distinctions are as follows:

Thorax and abdomen with the transverse bands on an average stronger.—
Forewing with all the markings in proximal half broad, confluent at their ends, more recalling those of subrepleta Walk., but still thicker, the outer ones slightly less oblique, that from the costa still showing indications of the knobbed formation behind the base of M² which is characteristic of militaris; discal spot on an average still more produced posteriorly, sometimes meeting the marginal band at R² and thus dividing the white spots of the radial cells, which in this case are much reduced; outer band of white spots near tornus (from M² almost to hindmargin) narrowed into a very elongate S.—Hindwing with the discal spot and innermarginal spot confluent as in subrepleta; abdominal margin more shaded with black than in either of the allies.

Andaman Islands: Port Blair, in coll. Tring Mus. (including type) and coll. L. B. Prout.

Although Rev. C. R. N. Burrows has examined the genitalia and considers it a form of *militaris*, I am more inclined to look upon this as a good species.

# 16. Dysphania subrepleta nias subsp. nov.

Ground-colour paler than in subrepleta subrepleta, from Sumatra and Borneo—in that race bright orange, in s. nias cadmium yellow or paler.

Nias, a very long series in coll. Tring Mus.

# 17. Dysphania subrepleta semifracta subsp. nov.

3. Ground-colour at least as pale yellow as in subrepleta excubitor Moore.—Forewing with the black proximal markings narrower than in average s. subrepleta, but less reduced than in the more extreme forms of s. excubitor.—Hindwing with the abdominal-marginal black mark reduced, not confluent with the discal spot; postmedian band narrow, about as in s. excubitor.

Hainan: Mt. Wuchi, May 1903 (type in coll. Tring Mus.); Youboi, June 1904 (in coll. Tring Mus.); Hoihow, 1915 (C. T. Bowring; in coll. L. B. Prout).

Nearest some forms of D. subrepleta excubitor ab. sodalis Moore, in which, however, the abdominal-marginal band is confinent with the cell-spot.

# 18. Agathia lycaenaria (Koll.)

This species shows considerable geographical variation, to which attention has not hitherto been called. The name-type, inhabiting North India (and from which I do not at present separate the forms from the Malay Peninsula and Hong Kong, Hainan, etc., though I believe that better material will reveal the existence of two further races), is excellently figured by Herrich-Schaeffer, Samml. Aussereur-Schmett. i., fig. 339, under the synonym of albiangularia, and has a  $\mathfrak{P}$  with the markings much broader, not or scarcely interrupted. Guenée's figure (Spec. Gén. Lép. ix. t. 3, f. 12), on a Masuri  $\mathfrak{P}$ , but probably defective, shows  $\mathfrak{F}$  coloration, the postmedian band complete but narrow. The following subspecies are to be differentiated:

A. lycaenaria impar subsp. nov.  $\mathcal{S}$ : Forewing with postmedian band much narrower, the mark at  $\mathbb{R}^3$ -M¹ reduced to a small lumule, that of hindmargin close to tornus or wanting.  $\mathfrak{P}$ : Markings broader than in the name-type.

S. India: Belgaum, Travancore, etc. Type (Belgaum, August 1895) in coll. Tring Mus.

A. lycaenaria luzonensis subsp. nov.  $\delta$ : Markings in both sexes broken into spots.

Near Manila (J. Whitehead). Type in coll. Tring Mus.

I only know two examples, but according to Semper (Schmett. Philipp. ii. 638) this form is constant on the Philippines.

A. lycaenaria par subsp. nov.  $\mathcal{S}$ , 33-34 mm.;  $\mathfrak{P}$ , 37-38 mm. Sexes alike, the  $\mathcal{S}$  having more broadly discolorous costal margin of forewing and more reddish markings than the  $\mathcal{S}$  of the other forms. Forewing with postmedian band broken into spots, about as in *l. luzonensis* but rather more oblique ontward in anterior half, the spot at  $R^3$ -M¹ (which is intermediate in size between those of *l. lycaenaria* and *l. impar*), closely approaching termen posteriorly, succeeded by an additional red dot in front of  $M^2$ ; hindmarginal spot near tornus. Hindwing with the tail at  $R^3$  scarcely so strong as in the other forms, midterminal blotch more pyramidal than in the other forms, expanding gradually to termen; abdominal-marginal spot nearer tornus than in the other forms.

Palos Bay, Celebes, August—September 1896 (W. Doberty); Towaya, N. of the Bay, a pair, including type; Dongala, S. of the Bay, a pair; all in coll. Tring Mus.

Possibly a distinct species.

A. lycaenaria hedia subsp. nov.  $\mathcal{S}$ : Forewing nearly as in *l. impar*, the postmedian spot at  $R^3$ - $M^1$  rarely quite so small, that at hindmargin (except in one or two Sunda Island specimens) less abnormally placed; triangular terminal marks at  $R^2$  and  $R^3$  reduced, the anterior one almost or quite obsolete. Hindwing about as in *l. impar*.  $\mathfrak{P}$ : Near that of *l. luzonensis*, or intermediate towards *l. lycaenaria*, the postmedian of both wings somewhat more nearly approaching the termen in middle, the midterminal spot of hindwing consequently reduced.

Queensland: Townsville (F. P. Dodd), a series in coll. Tring Mus. I also refer here, at least provisionally, the few specimens I have seen from the Sunda Islands (Java, Sumba, Alor, Timor), though the females, at least on the more westerly islands, deviate less from *l. lycaenaria*.

# 19. Agathia albicurvatura spec. nov.

 $\delta$  ?, 29-31 mm. Face rose-pink, mixed with grey, lower part whitish. Palpus in  $\delta$  with third joint very short, in ? moderately elongate; mostly rosy, beneath whitish. Vertex narrowly rosy; occiput green. Thorax above green in front and with a large green oval patch posteriorly, beneath whitish; abdomen above rosy, with a slight green admixture and some dark grey irroration, beneath whitish. Hindtibia in  $\delta$  very strongly dilated, with dense light-brown hair-pencil and short terminal process; hindtarsus in  $\delta$  short.

Forewing without developed flap of scales from M over cell beneath; bright green; costal edge broadly (at base narrowly) rose-pink, with a lilac tinge and with sparse dark irroration; markings similarly coloured, in the of rather more lilac than than in the ?; basal patch scarcely narrowed in meeting the costal streak; antemedian band very narrow, in & twice interrupted (or indicated only by a few white scales), in \( \frac{9}{2} \) twice constricted, scarcely bent outward in middle; postmedian band accompanied proximally by an almost regularly curved white line from two-thirds costa to hindmargin 1 mm. or less from tornus; the band itself very narrow, constricted (in & interrupted) about R2, meeting the narrow terminal band just behind R3; fringe pale brown, palest proximally, with vague dark dividing-line accentuated by darker spots opposite the veins, those at apex and R<sup>3</sup> strongest, but not as sharp as in many species. — Hindwing shaped nearly as in the typical group, but with the tail at R3 relatively somewhat shorter, that at M1 well appreciable, the discrepancy between the two therefore less sharp; postmedian band narrow, dentate inward before and behind R3, accompanied proximally by a conspicuous white line; the green anterior patch between this and terminal line relatively long and narrow; blackish terminal mark in the tail triangular, the accompanying white mark rather narrow; extreme abdominal margin white, becoming mixed with rosy before middle, the rosy colour widening very gradually and showing (especially in the ?). a hook-shaped projection 3 mm. before tornus.

Underside pale, with the antemedian weakened, the other markings darkened.

Dougala, S. of Palos Bay, Celebes, August—September 1896 (W. Doherty).

Type in coll. Tring Mus.

# 20. Agathia asterias Meyr.

This species appears to be geographically as well as individually variable. It was described from the  $\mathcal{P}$  and always shows rather strong sexual dimorphism, the  $\mathcal{SS}$  having the markings much darker, in most forms narrower. It differs from distributa T. P. Luc. in the more extended markings, the subapical band of the forewing not or scarcely interrupted, running to termen, whereas in distributa it is much interrupted and runs to hindmargin well proximally to tornus; in the reddened abdominal margin of hindwing and the well-developed white spot before the tail; and finally in the abdomen, which in the  $\mathcal{SS}$  is strongly darkened dorsally, especially in a sort of irregular double line bordering the slight crests, in the  $\mathcal{PS}$  more mottled, whereas in both sexes of distributa it is green, with a quadrate blackish spot on first tergite and a few pairs of small dots posteriorly.

A. asterias asterias, 32-38 mm., very rarely attaining the latter measurement. Bands on an average narrow, especially in the 3, rarely very strongly swollen into spots.

Queensland.

A. asterias diversilinea Warr. Generally much larger (42-48 mm.), but very variable in size. 3 otherwise little different from a. asterias, 2 with the red markings much broader, alternately swollen and constricted.

British New Guinea and its eastern satellite islands. The form from the Snow Mountains, Dutch New Guinea, is intermediate between this and the following.

A. asterias ampla Pront. As large as the preceding or still larger; markings still further broadened, especially in the  $\mathcal{S}$ , the subapical and marginal bands of the forewing connected or almost connected along  $\mathbb{R}^3$ , enclosing a large round green spot between this and  $\mathbb{M}^1$ .

Arfak Mountains, Dutch New Guinea.

A. asterias irregularis subsp. nov. 39-42 mm. Both sexes with abdomen partly green, the medio-dorsal stripe remaining reddish, with the double black (in  $\mathfrak P$  redder) line sometimes a little interrupted; median band moderately broad, its swellings strong; subapical band of forewing narrowed to a thread between  $R^2$  and  $R^3$ , then suddenly widened into a blotch which is broadly confluent with the marginal band; marginal band quite narrow, irregular; hindwing with the red or purple shade on abdominal margin narrowed except near tornus, where it is swellen into a conspicuous spot, marginal band somewhat correspondingly formed to that of forewing.

Key Islands (H. Kühn). Both sexes in coll. Tring Mus.

### 21. Agathia eromena spec. nov.

3, 42-44 mm. Closely similar to certain forms of asterias, of which it may even prove a local race, in spite of the geographical separation. Distinguished as follows:

Abdomen above predominantly reddish-brown, with the crests better developed, blackish.—Forewing with costal margin purplish to nearer base than in most asterias, median band very narrow, sometimes excessively narrow and broken, rather markedly bent outward in middle; subapical and marginal bands, on the other hand, almost as well developed as in asterias ampla, less mixed with blackish proximally, not separated from the ground-colour by any yellow band; the enclosed green subapical patch not or barely reaching R<sup>3</sup>.—Hindwing with submarginal (marginal) band rather broad, its proximal edge almost even, rather regularly and markedly dentate, not edged with yellow; the white spot before tail narrow to very narrow.—Underside strongly suffused with buff.

S. Celebes, August-September 1891 (W. Doherty). Type in coll. Tring Mus.

A. eromena cara subsp. nov., 36 mm., is still nearer to asterias, in that the borders are yellow-edged proximally, the green subapical patch of forewing crosses R<sup>3</sup>, and the white spot at tail of hindwing is less narrowed.

Philippines. Type, Palawan, August—September 1894, in coll. Tring Mus.

This is probably the *carissima* of Semper (*Schmett. Philipp.* ii. 638), nec Butl.; the occurrence of true *carissima* on the Philippines seems unlikely.

# 22. Agathia furtiva spec. nov.

3, 32 mm. Exceedingly like some forms of asterias Meyr. Palpus with third joint still more minute, almost entirely concealed; very little marked with red or fuscous. Structure otherwise similar. Abdomen not blackened on mid-dorsum, not showing the paired black markings which are usual in asterias.

Forewing with the general coloration and pattern of dark-marked, narrow-banded & asterias; basal patch broadening rather than narrowing anteriorly; median band forming three small triangular markings, slightly connected by a pale line; the oblique subapical band strongly interrupted at R², its proximal edging entirely or predominantly white (in asterias bright yellow); marginal band exceedingly narrow but almost even throughout, only narrowing a little towards the apical spot, which is very small—the swelling into spots at R² and R³ which is indicated even in the narrowest-bordered asterias altogether wanting.—Hindwing also nearly as in asterias, but with the red or purple markings on distal part of abdominal margin much reduced, except for a conspicuous triangular or somewhat hook-shaped projection 3-4 mm. from tornus, from the apex of which a pale, dark-spotted line is traceable to the distal border just in front of fold; proximal edging of submarginal band white or whitish.

♀, 32-35 mm. Quite similar to the ♂ except that the markings are redder.

Palpus not quite so long as in asterias ?.

Dammer Island, December 1898, including the type; Larat, February 1901 (H. Kühn); a short series in coll. Tring Mus. Virtually the same race occurs on Java, though the females are there larger and with the markings not quite so narrow. Material must be awaited from the intervening islands.

# 23. Agathia laetata isogyna subsp. nov.

 $\mathcal{S}$ ?. Distal borders deeper purple than in even the  $\mathcal{S}$  of l. laetata (from S. India \* and Ceylon) and alike in both sexes, its proximal edge on forewing less curved or bent in middle.

Assam to Malay Peninsula. The type  $\mathcal{S}$ , from Cherrapunji, in coll. Tring Mus. The ground-colour may be of an intenser green, but I have seen few *l. laetata* in such beautiful condition. This race bears a remarkable resemblance to the  $\mathcal{S}$  of prasinaspis Meyr., except in its smaller size and the different shape of the green subapical spot of forewing, which in prasinaspis is ovoid, while in *l. isogyna* its distal edge is quite flat, except for the minute, scarcely noticeable indentations between the veins. prasinaspis shows strong sexual dimorphism.

# 24. Agathia hilarata hainanensis subsp. nov.

3, 32-34 mm. On an average smaller than h. hilarata Gnen., the terminal and subapical bands narrowed, the latter threadlike or almost interrupted between R<sup>2</sup> and R<sup>3</sup> of forewing; antemedian line of forewing also narrowed, straighter, only very faintly angled at M and scarcely becoming more oblique ontward at hindmargin. In addition the markings appear somewhat more variegated, their ground-colour rather lighter reddish, with partial dark proximal edging and dark spots in places. Thorax and base of abdomen above predominantly green.

I not essentially different from that of h. hilarata; markings perhaps lighter,

brighter reddish; thorax and abdomen about as in  $\delta$ .

Hainan: Mt. Wuchi, May 1903, type 3 and a ?; Wuteryong, May 1903, 1 ?; Cheng-Mai, July 1902, August 1904, 2 33; Taipinshi, June 1906, 1 3; all in coll. Tring Mus.

<sup>\*</sup> Fabricius only gives "East Indies" as locality, but the probabilities support the determinations of Moore and Aurivillius, the latter (Ent. Tid. xviii. 165) made on an examination of the type.

#### 25. Agathia hilarata latilimes subsp. nov.

Rather smaller than h. hilarata, the antemedian band of forewing not quite so oblique posteriorly, the border of both wings broader—at least 1 mm. wide at the narrowest point on each side of the subapical green patch of the forewing and at hindmargin, at least 2 mm. wide proximally to the green patch of hindwing—on forewing not containing a white dot between R<sup>3</sup> and M<sup>1</sup>.

W. Java. Type in coll. Tring. Mus.

# 26. Agathia codina australis subsp. nov.

On an average slightly smaller than c. codina, from the Khasis, but showing especially the following differences:

Both wings with the dark parts more purplish, in the distal area beneath broadened.—Forewing with the green apical patch reduced.—Hindwing with the white costal triangle larger, tinged with violaceous, the postmedian line much more acutely angled at R<sup>3</sup>.

Penang, November 1896 (Curtis), type and others in coll. Tring Mus. Also from Kina Balu, N. Borneo.

# 27. Alloeopage ciuerea (Warr.)

This species, except for the very strong sexual dimorphism, shows little variation on the mainland of New Guinea, but it is very interesting on some outlying islands. The forms at present known may be separated as follows.

A. cinerea cinerea. This was described (Nov. Zool. iii. 284) from a \$\forall \text{ from}\$ Fergusson Island, and the \$\mathcal{S}\$ has not yet been made known. It differs from the \$\mathcal{S}\$ of subsp. velata in its larger size (almost or quite equalling that of the \$\mathcal{T}\$ nametype), much larger discal mark of forewing, more distinct cell-dot of hindwing, thicker and more distinct lines and frequently confluent dark blotches at the costal end of the postmedian and subterminal of forewing. Often also the postmedian is marked with black between \$\mathcal{S}^5\$ and \$\mathcal{R}^3\$, almost as in Helicopage hirundinalis Warr.

Dutch New Guinea: Ninay Valley, Central Arfak Mountains; Upper Setekwa River and near Oetakwa River, Snow Mountains. German New Guinea: Stephansort. British New Guinea: Biagi, Mambare River; Holnicote Bay to Owen Stanley Range; Kumusi River; Upper Aroa River. Fergusson Island. North Queensland: Kuranda and Geraldton, near Cairns.

A. cinerea virescens subsp. nov.  $\mathcal{S}$ : size of name-typical form.—Forewing with first line only represented by three conspicuous dots, one at each margin and a large round one in cell; costal blotches obsolete; subterminal line broken into spots.—Hindwing with the lines of distal half thickened posteriorly, but not united into a blotch.  $\mathcal{P}$ : almost concolorous with  $\mathcal{S}$ , the cloudings olivaceous, not brownish or reddish.\*

Rook Island, August 1913 (A. S. Meek). Type in coll. Tring Mus.

A. cinerea velata (= Helicopage velata Warr., Nov. Zool. iv. 390). Besides Warren's type, three others (2 & 3, 1 \copp) from Woodlark and a single \copp from Rossel Island are in the Tring Museum; already discussed by Warren, Nov. Zool. vi. 330. Smaller than the two preceding.

A. cinerea euri subsp. nov. Similar to the preceding, agreeing in size, but differing in that the 3 lacks the large grey blotch of the hindwing and has less

<sup>\*</sup> Warren describes the markings of the name-type partly as "olive-grey," but this is misleading.

distinct thickenings at the costal end of the postmedian and subterminal lines of the forewing. The  $\mathfrak P$  is rather variable, sometimes nearly like that of c. velata, but on the whole more sharply marked with black postmedian dots, the straight blackish line from apex towards tornus sometimes thickened, occasionally ending in a tornal blotch.

Sud-Est Island, April 1898 (A. S. Meek),  $4 \ \mathcal{S}, 5 \ \mathcal{P}$  in coll. Tring Museum. Warren, Nov. Zool. vi. 330, in discussing (without naming) this form, refers to it one from Suer, Mefor. This reference, I find, is based on a single small  $\mathcal{S}$ , somewhat discoloured; I believe it represents another distinct race, similar to c. euri, but not yet available for classification.

### 28. Dooabia lunifera plana subsp. nov.

3. Differs from the name-typical lunifera Moore, from Assam, in having the antemedian line almost obsolete, indicated by weak dots on the veins, the postmedian of both wings also weakened, chiefly expressed on the veins, the posterior terminal blotch of forewing and the terminal markings of hindwing wanting.

Kina Balu, N. Borneo (J. Waterstradt). Type in coll. Tring Mus.

The forewing is less elbowed at R<sup>3</sup>, the termen of hindwing less strongly waved than in most examples of *l. lunifera*, but there is a slight variability observable in the shape in the latter race.

# 29. Ornithospila avicularia insularis subsp. nov.

 $\delta$   $\circ$ , 37-41 mm. Besides the markedly smaller size, this differs from the Indian form as follows: Ground-colour slightly deeper green; terminal line rather stronger; fringe deeper brown-red, approaching that of *cincta* Walk.; costal edge of forewing more strongly dark-dotted.

Sumatra: Upper Palembang district (Volcker), a series in coll. Tring Mus., including the type. Also one from Kuching, Borneo.

This is clearly the insect which Snellen, in Veth's Midden-Sumatra (iv. (8) p. 53), takes to be the 3 of his circumflexaria, founded and figured on a single \$\varphi\$ from Silago, Central Sumatra; the last-mentioned, a synonym of submonstrans Walk., is certainly his type.

# 30. Ornithospila bipunctata spec. nov.

3 °, 42-46 mm. Distinguished from *submonstrans* Walk., with which it has hitherto been confounded, as follows:

Palpus more infuscated, without appreciable green stripe along second joint. Antenna of 3 with the pectinations not continuing quite so far distally. Both wings with termen smoother, apex of forewing less pointed, fringe not or only very feebly dark-spotted, lines less crenulate.—Forewing with costal edge scarcely dotted with reddish; lines generally nearer together; discal dot smaller.—Hindwing with a red discal dot in place of the circumflex mark; beneath generally with a more definite green distal border.

Bunguran, Natuna Islands, October 7, 1894 (Hose), type in coll. Tring Mus. Also from Penang, Selangor, Borneo, and Celebes. Here belongs Walker's (Oxford Museum) original & "submonstrans" from Borneo, but his type (the ? in coll. Brit. Mus., the only specimen registered in his List Lep. Ins.; cfr. Swinh., Cat. Lep. Het. Oxf. Mus. ii. 403) is of the other species.

#### 31. Ornithospila submonstrans moluccensis subsp. nov.

Costal margin of forewing as in O. bipunctata Prout, the lines also approximated, as in that species, and rather more weakly crenulate than in s. submonstrans; spots on fringe somewhat intermediate between those of the two forms named.

Laiwui, Obi, September 1897 (W. Doherty), type in coll. Tring Mus. Also others from this locality and Obi Major (including 1 ?) and from Batjan.

The superficial approach of this race to *O. bipunctata* does not at all extend to the discal marks, which are on an average even stronger than in *s. submonstrans*.

### 32. Ornithospila odontogramma spec. nov.

3, 40–48 mm. Face green. First and second joints of palpus whitish, with a red-brown stripe on upper part of outer side, also at tip of second joint; third joint blackish fuscous. A narrow white fillet between antennae. Antennal pectinations of 3 relatively long, continuing farther distally than in aricularia. Thorax and abdomen green, beneath whitish.

Forewing bright apple-green, at least as vivid as in avicularia; costal edge whitish, strongly dotted and spotted with pinkish grey; lines rather distinct, dark green, the pale edging on the reverse sides very weak; postmedian farther removed from antemedian than in the other species, especially in anterior part, where it bulges ontward, more deeply dentate than in any other of the genus; cell-dot rather large, red, mixed with blackish; the smaller mark on DC<sup>2</sup> also present (otherwise only occurring in avicularia); terminal line developed; fringe pinkish white or very pale pink, darkened at the vein-ends, proximally somewhat whiter between them.

—Hindwing without first line, the angulated cell-mark strong, the rest as on forewing.

Forewing beneath paler, at hindmargin whitish; cell-mark strong; lines feebly indicated, not dentate; terminal line and fringe nearly as above. Hindwing beneath dirty yellowish green, at termen greener; cell-mark and green postmedian line indicated; terminal line and fringe nearly as above.

Moluccas: Obi Major (Waterstradt), type and others; Batjan, March 1892 (W. Doherty; also from Waterstradt); Amboina, February and August 1892 (W. Doherty). A series in coll. Tring Mus. Also a single worn 3 from Kayeli, Buru, March 1897 (W. Doherty).

Differs from submonstrans moluccensis in the absence of green band on palpus, presence of red mark on DC<sup>2</sup> of forewing, much more dentate lines, etc.

# 33. Ornithospila viridimargo spec. nov.

\$\,\ \psi\$, 41 mm. Face green. First joint of palpns white; second joint green, mixed with white beneath; third joint long, dark reddish fuscous. Vertex green, narrowly white between the antennae. Thorax and abdomen green, partly white beneath.

Forewing with apex not acute, termen almost smooth, very gently curved; bright green, not quite so yellowish as in the other species; costal edge, except at extreme base, very narrowly whitish with green and red-brown dots; lines vagne, dull reddish; antemedian almost obsolete; postmedian deeply lunulate-dentate, about 4 mm. from termen at radials, receding (but almost obsolete) anteriorly, very gently incurved between R<sup>3</sup> and SM<sup>2</sup>; discal dot rather small, dull reddish, mixed

with black; red terminal line almost obsolete, invisible to the naked eye, discernible with the lens as a series of exceedingly fine, well separated interneural marks; fringe green, at tips whitish grey.—Hindwing with termen scarcely prominent at R<sup>3</sup>; postmedian and terminal lines and fringe as on forewing; the characteristic cell-mark of the genus present, thickened on DC<sup>2</sup>, very slender on anterior half of DC<sup>3</sup>, enlarged into a black-mixed dot at cell-fold, here terminating.

Underside paler green.——Forewing with costal edge nearly as above; cell-dot present; very shadowy indications of a postmedian line.——Hindwing almost unmarked; very slender traces of the cell-mark.

Type in coll. Tring Mus., unfortunately without any indication of its source.

Very distinct in the reddish postmedian line, obsolescence of red terminal line, and in the green fringe.

# 34. Anisozyga albifimbria viridimargo subsp. nov.

Differs from a. albifimbria Warr. (Nov. Zool. x. 262), the form from Bougainville, Treasury, Choiseul, Gizo, Isabel, Florida and S. Christoval Islands, as follows:

- 3. Scarcely distinguishable above except that the costal margin of forewing is less mixed with white; subterminal white spots small. Submarginal band of forewing beneath broadened in anterior part and extending faintly to the hindmargin, continued (narrow but distinct) on anterior half of hindwing.
- ?. Termen not white, except for some quite small lunules proximally to some of the green ones (especially before and behind SC<sup>5</sup> of the forewing); the green marginal lunules larger; fringe less pure white. Both wings beneath with complete, rather broad brown submarginal band.

Vella Lavella, February—March 1908 (A. S. Meek). Type in coll. Tring Mus. The antemedian line is on an average less angulated on submedian fold than in a. albifimbria, but this is not constant.

# 35. Anisozyga subliturata subobsoleta subsp. nov.

 $\delta$  ?. Both wings beneath with less suffusion in proximal half; forewing with first line entirely wanting; hindwing beneath with first line (or band) entirely wanting in  $\delta$ , slender and faint in ?.

Ninay Valley, Central Arfak Mountains, Dutch New Guinea. Type in coll. Tring Mus.

# 36. Anisozyga iridescens longiuscula subsp. nov.

Larger than *i. iridescens* Warr. (29-35 mm., as against 26-30), relatively slightly longer-winged; & otherwise scarcely distinguishable, the terminal line, however, more mixed with fuscous. ? as described by me in *Nov. Zool.* xx. 407.

Mount Goliath, Central Datch New Guinea. Type (3) in coll. Tring Mus.

I find that innuba Warr. (Nov. Zool. xiv. 128), with the terminal markings redder and extending in a breadth of almost 1 mm. to tornus on both wings, is the ? to i. iridescens (Biagi); reducta Warr. (Nov. Zool. xix. 70), from Ninay Valley, Central Arfak Monntains, is another race of the same species, the ? with the border shaped almost as in i. iridescens = innuba, but coloured as in i. longiuscula.

### 37. Chloromachia semialba viridior subsp. nov.

Forewing above and beneath with the brown clouding more restricted, in its broadest part scarcely reaching behind the median vein; postmedian line merely waved, almost parallel with termen throughout, entirely lacking the strong central projection of s. semialba. Both wings beneath with the distal brown spots less developed.

Ceylon. Type & in coll. Tring Mus. Paratypes, both sexes, in coll. Brit. Mus.

#### 38. Uliocnemis elegans unidentata subsp. nov.

3?. Forewing with the postmedian line slightly more dentate in anterior half; anal blotch on an average rather larger; the minute terminal dots obsolescent above and beneath.—Hindwing with apical blotch on an average broader, especially in the 3; postmedian line less straight, somewhat incurved between R<sup>2</sup> and M<sup>2</sup>, markedly dentate outward on M<sup>2</sup>.

Rook Island, July 1913 (A. S. Meek). Type in coll. Tring Mus.

To judge from a single example in my collection, as well as the geographical probabilities, this is also the form from the Bismarck Archipelago (cassidara Pagenst., nec Guen.).

#### 39. Spaniocentra intermediata spec. nov.

3, 34 mm. Face pale red. Palpus red above, white beneath. Vertex white; occiput narrowly red. Antennal shaft white proximally, reddish distally; pectinations twice as long as diameter of shaft. Thorax above green. Abdomen above red, heavily dotted with black, second and third tergites each with a pair of oval white spots, as in the allies. Hindtibia strongly dilated.

Forewing with termen bent at R³, but not nearly so strongly as in undiferata Walk., the anterior part being rather more oblique, the posterior decidedly less so; green; the costal margin yellowish, irrorated with red and black, the extreme costal edge snow-white; lines almost obsolete, with the faintest indication in paler green; cell-dot red, mixed with black; tornal blotch very dark (red, almost entirely overlaid with black and olivaceous, as in pannosa lyra Swinh.), reaching, but not or barely crossing M¹, at hindmargin narrowed almost to a point; terminal line red, mixed with violaceous and slightly irrorated with black, expanding a little at the veins and apex, but much less than in undiferata; fringe yellowish, tinged in places with red and with vague dark spots or cloudings opposite the veins.—
Hindwing shaped nearly as in pannosa Moore, termen very slightly more convex; a distinct dot on DC³, corresponding to that of forewing; the dentate postmedian line faintly indicated in whitish green; terminal line nearly as on forewing, swelling slightly more from apex to R¹, at R³ and at M¹; fringe as on forewing.

Both wings beneath whitish green; forewing with the tornal blotch rather less sharp than above, almost broken into two, leaving traces of the ground-colour just behind M<sup>2</sup> and thence along termen nearly to tornus, costal margin somewhat yellowish; hindwing unmarked, or with very small fuscous terminal spot behind SC<sup>2</sup>; fringes yellowish.

S. Celebes, August—September 1891 (W. Doherty). Type in coll. Tring Mus. In spite of the very different shape, this appears to have been mixed with undiferata Walk., from the same locality; except for the difference in the hind-tibia, it might almost be taken for a subspecies of pannosa Moore.

# 40. Comibaena mariae syndyas subsp. nov.

 $\delta$   $\circ$ . Sexes alike, the tornal blotch of forewing and apical blotch of hindwing chocolate, even more uniform than in the **female** of mariae mariae T. P. Luc., from Queensland, recalling the darkest aberrations of integranota Hmpsn. The tornal blotch of forewing is generally rather smaller, only just crossing M¹, whereas in m, mariae it usually reaches R³. Hindwing with discal dot less sharp, almost or entirely obsolete beneath.

New Gninea: Ninay Valley, Central Arfak Mountains; near Oetakwa River, Snow Mountains (including the type, coll. Tring Mus.); Mount Goliath; Kumusi River, N.E. British New Guinea; Goodenough Island.

As ab. (?) aporia nov. I describe a  $\mathcal{S}$  form in which the centre of the blotches is paler, their border dark, nearly as in *m. mariae*, from which, however, the new form differs in having the blotch of forewing larger, reaching  $\mathbb{R}^2$ , the dark part of both blotches broader. Ninay Valley, 3500 ft., November 1908—January 1909, 4  $\mathcal{S}$  in coll. Tring Mus. taken together with 4 typical  $\mathcal{S}$  of *m. syndyas*. Possibly a separate species, but I can find no structural difference, and the **colour** variation is only such as is well known in *integranota* Hmpsn.

# 41. Chrysochloroma meeki malthaca subsp. nov.

3, 36-38 mm. Considerably smaller than meeki meeki, from the Trobriand Islands, and of a lighter, more yellowish shade, approaching apple-green.

St. Aiguan, Louisiades, December 1897 (A. S. Meek). Type in coll. Tring Mus. The  $\Im$  of m malthaca has a whitish underside, as in megaloptera Lower, and indeed altogether resembles that species except in the more crenulate margin and in the much more bent line of the hindwing. The  $\Im$  of m mechi has not been received.

#### 42. Gelasma subannulata spec. nov.

3, 38 mm. Face dull dark reddish. Palpus one-and-a-quarter times diameter of eye, with third joint very short; above dull dark reddish, mixed with black; beneath whitish. Antennal pectinations rather long, continuing to about the thirty-seventh joint. Thorax and abdomen concolorous with wings. Hindtibia strongly dilated, the spurs very short.

Forewing with termen slightly straighter and more oblique than in glaucaria Walk.; SC¹ free; very pale, glossy yellowish green (perhaps a little discoloured in relaxing), the costal edge narrowly yellow, with a few red-brown specks; lines marked by slightly deeper green shading and by having their reverse edges whitish, as in glaucaria; antemedian 4 mm. from base, dentate inward on M and SM², lunulate ontward between and in cell; cell-mark large, slightly pale-centred, suggesting a long, narrow ocellus; postmedian line lunulate-dentate, 4–5 mm. from termen, nearly parallel therewith, slightly receding at costa and with a deeper lunule between M and SM²; terminal line very slender, interrupted, blackish fuscous; fringe with small but sharp blackish dots opposite the veins.—

Hindwing rather clongate at abdominal margin, rather squared at apex, tail at R³ strong (shape of section Thalerura, though not very extreme); antemedian line wanting, postmedian as on forewing, terminal slightly stronger; cell-spot elongate, but not ocellated; fringe as on forewing.

Underside white, with costal edge of forewing yellow; fringes yellow, with blackish dots.

Tondano, N. Celebes, September—October 1899. Type in coll. Tring Mus.

#### 43. Gelasma hemitheoides spec, nov.

3, 28-31 mm. Face and palpus dirty brown, the latter narrowly whitish beneath. Vertex narrowly white. Occiput, thorax and abdomen concolorous with wings. Antennal pectinations long and lax. Hindtibia not very strongly dilated, the hair-pencil present, but not very thick.

Forewing olive; costal edge ochreous, with dark dots or strigulae; lines white; antemedian from before one-fourth costa, oblique outward, strongly curved in cell, rather deeply angled inward on M, excurved at fold, somewhat incurved on SM<sup>2</sup>; postmedian fine and rather weak towards costa, otherwise strong, deeply lunulatedentate, the deepest and thickest lunule at the fold; discal mark elongate, nearly obsolete; termen with small whitish dots at vein-ends; a fine whitish line at base of fringe, which is otherwise dark grey, darker proximally than distally.——Hindwing quadrate, with abdominal margin long, tail at R<sup>3</sup> strong; discal mark sometimes rather stronger than on forewing; postmedian line reproduced, projecting outward at R<sup>3</sup>—M<sup>1</sup>; termen and fringe as on forewing.

Underside white, forewing anteriorly slightly greyish and with costal edge nearly as above; fringes nearly as above.

Khasis: Shillong, etc. Type in coll. Tring Mus.

Has been confused with *griseoviridis* Warr. Wings longer, with longer tail to hindwing (shape of the *Hemithea insularia* group), colour less dark grey, lines much more deeply lunulate-dentate.

### 44. Gelasma mutatilinea spec. nov.

3.32 mm. Similar to thetydaria Guen. Palpus rather longer, one-and-a-half times diameter of eye, as against one-and-a-quarter. Pectinations of antenna not quite so long, ceasing earlier (little beyond middle of shaft). Face darker. Wings narrower, hindwing with apex squarer, tail longer (about shape of preceding species).—Forewing with costal edge more strongly dark-dotted, the green lines (bands) not quite so thick, antemedian more curved inward anteriorly, postmedian receding from termen anteriorly (in thetydaria strongly approaching it), fringe darker (olive-green in proximal half).—Hindwing with DC less oblique outward.

Khasis, Type in coll. Tring Mus.

#### 45. Thalassodes tanymelea spec, nov.

 $\delta$  ?, 43-45 mm. Excessively like dorsipunctata Warr, differing as follows: Palpus in both sexes longer, third joint in  $\delta$  almost, in ? fully as long as second. Antennal pectinations in  $\delta$  longer. Hindtibial process in  $\delta$  longer, extending somewhat beyond middle of first tarsal joint.—Forewing with postmedian line still weaker, appearing less dentate, through the entire suppression of the white dashes on the veins.—Hindwing rather more weakly angled at  $R^3$ , postmedian line as on forewing.

Rook Island, July 1913, 2 33, one being the type; August 1913, 2 ?? (A. S. Meek). Type in coll. Tring Mus.

A pair of dorsipunctata Warr. occurred in the same locality in July.

#### 46. Thalassodes aptifimbria spec. nov.

39, 44-46 mm. Like hypocrites Prout, but without the white terminal dots and with the fringe green, unspotted, paler distally and with a fine whitish line at its base. Slightly bluer green, the characteristic white spots at hindmargin generally narrower.

Darjiling, a few examples. Type & in coll. Tring Mus.

It is not likely that this is merely a local race of hypocrites. I know of no analogy for such a wide divergence in fringe coloration, and moreover I have before me a single example of aptifimbria from the Khasis, where otherwise hypocrites shows no variation.

#### 47. Thalassodes effata spec. nov.

3, 54 mm. Face bright green. Palpus less than one-and-a-half times as long as diameter of eye, third joint about half as long as second; green on onter side, whitish beneath. Vertex white; occiput green. Antenna white at base, otherwise yellow ochreous, somewhat more reddish beneath. Thorax green, partly whitish beneath; pectus strongly hairy. Abdomen above green, beneath whitish. Fore and middle legs partly reddish-brown above; hindfemur rather strongly hairy; hindtibia dilated, with strong ochreous hair-tuft and short terminal process.

Forewing with termen slightly curved anteriorly and close to tornus, straight or very slightly incurved between; deep pea-green, with costal edge narrowly pale ochreous and with slight blue-whitish strigulation; near base somewhat more mottled with blue-whitish, an indistinct postmedian band of the same from base of M¹ to hindmargin and still more faintly anteriorly to M¹; coarse and copious strigulae and dots at distal margin for a width of 3 or 4 mm. (narrowing to apex); fringe green, rather paler distally.—Hindwing with the angle at R³ moderate; the whitish strigulation and mottling in basal and central areas stronger, except along abdominal margin and on the raised discocellulars, a rather broad green postmedian band consequently distinct, angulated about M¹ near the termen, becoming broader and more diffuse to abdominal margin and tornus.

Underside similar but much paler, costal margin of forewing more broadly whitish ochreous.

Batjan (Waterstradt). Type in coll. Tring Mus.

# 48. Thalassodes acutipennis spec. nov.

3,34 mm. Face rather narrow, green. Palpus with third joint rather elongate; green, paler beneath. Vertex white. (Thorax and abdomen discoloured.) Hind-tibia with hair-pencil and a rather short terminal process (length of terminal spurs).

Forewing with apex acute and slightly produced, termen rather strongly oblique, except close to apex almost straight; SC<sup>1</sup> free, R<sup>1</sup> long-stalked; yellowish green, more approaching the colour of subviridis Warr. than the normal Thalassodes colour; some whitish strigulation; traces of a diffuse whitish postmedian line or band, rather nearer to termen than in most of the species.——Hindwing with apex squared, angle at R<sup>3</sup> moderately strong, termen otherwise straight; traces of an angulated postmedian band, corresponding to that of forewing.

Underside apparently little paler, unmarked.

Ruk (Caroline Islands), June 1896. Type in coll. Tring Mus.

The unique type is unfortunately a good deal rubbed, but shape, colour, and structure will render it easy of recognition.

# 49. Strepsichlora remissa nom. nov.

Strepsichlora acutilunata ? Warr., Nov. Zool. xiv. 136 (1907) (nec 3).

Although I am still unacquainted with the true  $\mathfrak P$  of acutilunata and the  $\mathfrak S$  of the present species, I have no hesitation in separating the two. The species of this genus show no sexual and little individual variation, and the costal and median markings, the dotted termen and fringe, etc., of remissa are absolutely distinctive; the abdomen has the white spot on second tergite enlarged, the others obsolescent, whereas acutilunata has a uniform row of small dots. The coincidence of the occurrence of the two species in the same locality, which misled Warren, is less remarkable when it is observed that the single  $\mathfrak P$  (remissa) was taken in January—probably a straggler from an earlier brood—the series of  $\mathfrak S$  (acutilunata) February to April.

It may be here remarked that *dissimilis* Warr. (*Nov. Zool.* xix. 73) is a rather more strongly marked race, if not indeed a synonym, of *acutilunata*.

# 50. Oxychora dentilinea (Warr.)

Oxypora dentilinea ? Warr., Nov. Zool. xix. 80 (1912) (nec 3).

Warren described this species from the  $\mathfrak P$  and added a brief reference to the  $\mathfrak Z$  which he believed to belong to it. This  $\mathfrak Z$ , however, is a quite distinct species, exactly matched by a  $\mathfrak P$  from the same locality with strongly pectinate antenna, as in tenuis Warr. (cfr. Nov. Zool. xx. 432). This pair may, at least provisionally, be merged with assimilis Rothsch. (Lep. Brit. Orn. Un. Exped. p. 9), described from a unique and rather faded  $\mathfrak Z$ , which looks yellower green, with less fuscous costal edge and some other trifling differences.

# 51. Oenospila lucifimbria glaucilinea subsp. nov.

Brighter green than *lucifimbria lucifimbria* Warr., the lines twice as thick, of a more decided glaucous, the costal and distal edges brighter yellow.

Rook Island, July—August 1913 (A. S. Meek). Type & and 6 ?? in coll. Tring Mus.

# 52. Berta anteplaga spec nov.

3, 24-26 mm. General coloration of chrysolineata Walk. Antennal pectinations rather less long.

Forewing with termen smoother and more regular; SC¹ arising from cell, though close to its end, anastomosing rather strongly with C; the white spots rather less intense, much less regularly and quite differently distributed, those of the proximal and distal areas being very small, those of the median mostly wanting, replaced by a large, irregularly quadrate patch shortly beyond the cell, bounded by R¹ and R³, and a much smaller subcostal patch anterior to its distal extremity.—

Hindwing with termen rather less deeply dentate; distal spots much smaller than in chrysolineata.

Khasis, March 1894 (type) and February 1894 (3), all in coll. Tring Mus.

Labelled by Warren "albiplaga Warr."—evidently without consulting his type, which is smaller and duller, without the white median patches of the forewing, and with SC¹ stalked with the other subcostals.

#### SUBFAMILY GEOMETRINAE

#### 53. Hyposidra apiolenca spec. nov.

3, 50 mm. Head and body black.

Forewing with costa moderately strongly arched towards apex, termen oblique, shallowly concave between SC<sup>5</sup> and M<sup>1</sup>; dull brown-black, with rather thick, slightly deeper black antemedian and postmedian lines very faintly indicated; a white apical band, at the apex itself clouded with the ground-colour, especially at costa and between SC<sup>5</sup> and R<sup>1</sup>; proximal edge of this band extending from costa 7 or 8 mm. from apex to termen just in front of M<sup>1</sup>, very slightly lunulate inward between the veins.—Hindwing with termen waved, a slightly more definite excision between the radials, the tooth at R<sup>3</sup> noticeable but not large; without white marking.

Underside nearly as upper, forewing with slightly more noticeable whitish irroration and clouding on the black parts, hindwing in addition with a slightly paler tone along costa and distal area.

Medan, Doloc Baros Estate, Sumatra, May. Type in coll. L. B. Prout.

# A NEW ORTHOSTIXIS (FAMILY GEOMETRIDAE).

BY LOUIS B. PROUT, F.ES.

### Orthostixis impura spec. nov.

2, 40 mm. Head and body concolorous with wings; tip of palpus blackish.

Forewing above much less white than in the other species, almost drab-grey; markings essentially as in *cribraria* Hb., but with the antemedian row of dots forming a much stronger curve, the indefinite ones on C and SC being placed 6.5 mm. from the base, that on M 7 mm. from base (almost at the origin of M²), that on SM² scarcely 5 mm. from base; postmedian row of dots only weakly curved; all these dots small; those of the termen rather strong.—Hindwing concolorous, marked almost as in *cribraria*; cell-dot and terminal dots strong.

Underside concolorous, but with the costal and distal areas of the forewing somewhat darkened; cell-dots strong; both wings with a weak postmedian and rather stronger terminal series.

Troödes, Cyprus, July 7, 1911 (J. A. Bucknill). Type in coll. Tring Mus.

With only a single specimen, and that a  $\circ$ , it is impossible to decide whether this may be merely a local form of *cribraria*; it was received as "? *calcularia* Led." The connective bar between C and SC of the hindwing is present, but exceedingly slender.

# NEW ORIENTAL NOCTUIDAE IN THE TRING MUSEUM.\*

BY THE LATE W. WARREN, M.A.

#### 1. Ramadasa fumipennis spec. nov.

Forewing marked like pavo, but the basal half is blue-grey with fine black speckling and the outer half brownish yellow; the spot on inner margin beyond onter line large.——*Hindwing* yellow, the basal half suffused with fuscous except just beyond cell; a broad black subterminal band with a slight sinus on its outer edge in subterminal interval, the termen beyond it and fringe pure yellow.

Malay Peninsula.

#### 2. Ramadasa plumbeola spec. nov.

Forewing with basal half bluish grey speckled with black; the orange costal edge broken by three wide black dashes; the median line thick and black, outcurved to three-quarters of inner margin, single, the usual outer arm being represented only by a black triangle on costa; a fine blue line on the curved discocellular, edged internally by a fine black line which curves downwards obliquely parallel to outer line; this is velvety black and curved from costa to termen, with a slight diffuse cloud inside its lower end, but with no horizontal black streak or line of metallic scales; the three black spots beyond cell large; the subterminal spots larger; the spot on inner margin beyond outer line absent.—Hindwing blackish fuscous with the fringe only yellow.

1 & from the Khasia Hills, Assam.

The smallest species of the genus. The veins and folds are all straight and normal.

#### 3. Ramadasa biarcuata spec. nov.

Forewing coloured as in pavo, but in the 3 the basal area is more or less invaded by pale olive-brown; the median line is sinuous, not straight, and less oblique, reaching inner margin at two-thirds, black edged by pale lilac, often interrupted in midwing, single instead of double, the black outer arm only reaching subcostal vein, where it runs outwards and forms the oblique lower arm of the onter line, which runs obliquely from costa to fringe; the purplish metallic scales are restricted to a fine straight lustrous silvery line, reaching the red cloud, which is here elongate and edged on its inner side by a black line with the black dots below stronger; the lower edge of the outer line curves inwards along the discocellular, which is followed by a long narrow crescentic stigma filled in with olive and finely edged with silvery white; the inner-marginal area is generally darkened diffusely by a brownish cloud; subterminal dark dots as in pavo.—Hindwing yellow, rather paler in the 3.

Dutch and British New Guinea. Type from the Upper Setekwa R., Dutch S.E. New Guinea (A. S. Meek).

<sup>\*</sup> These descriptions were among the papers left by the late Mr. W. Warren. They have been compared with the specimens in the Tring Museum in order to make sure whether Mr. Warren had selected a specimen of each species or variety as type and labelled it as such. All the types have been found.— EDITORS.

#### 4. Ramadasa dissoluta spec. nov.

3. Forewing wholly dull pale brown, the basal half speckled with dark; costa in basal half orange with a single black dot at base and two subcostal dots beyond; median line hardly marked except at costa; outer line starting from an oblique black costal triangle, curved obliquely to termen and filled up with blne-grey, its lower arm curving round into the discocellular; the crescentic stigma filled in with blnish scales edged by yellow; the narrow streak above vein 5 yellowish edged with black, running into an elongate reddish mark which has no black edge, the two dots below quite small; subterminal dots as in pavo; fringe brown.—Hindwing pale yellow.

2 & from Vella Lavella, Solomon Islands (A. S. Meek).

# 5. Negeta abbreviata spec. nov.

Resembles sublineata Walk., but the wings much shorter; the costal edge yellowish; the subcostal nervules not marked; the oblique line from apex slightly bent at vein 3, not curved, and ending farther from base of inner margin, edged with white instead of yellow; subterminal line formed of grey spots in the intervals, preceded by the same grey blotches as in sublineata; no black terminal dots. Hindwing fuscous.

Hainan.

# 6. Nertobriga olivaria spec. nov.

Forewing pale olive-brown; the lines deep olive fuscous, rising from costal spots, all three (inner, onter, and subterminal) at first oblique outwards, then bluntly bent and oblique inwards, generally becoming indistinct towards inner margin; the space between outer and subterminal lines sprinkled with white scales, and the terminal area with fine white lines to termen between the veins; a dark brown dot at top and a white one at bottom of discocellular; orbicular represented by a black dot, not always present, in cell before inner line.——Hindwing pale olive brown.

Sikkim.

# 7. Stictoptera signifera unipuncta subsp. nov.

The median line runs obliquely outwards, thickened and black, the space beyond it before the onter line is fulvous, and the outer line is filled in with green except at costa; near the base of submedian fold is an elongate black spot.

1 ♀ from Bougainville.

# 8. Odontodes pallidifimbria spec. nov.

Forewing ochreous or greyish brown; a thick oblique black fascia from costa to submedian fold before inner line, which is ochreous and double; terminal area beyond outer line blackish, with a white spot on subterminal line between veins 5 and 6; inner margin bluish grey.——Hindwing velvety black, with the fringe yellow ochreous.

Penang, several specimens.

# 9. Cacyparis brevipennis spec nov.

Like hilaria, but the forewing broader and shorter; the curved yellow band broader in both sexes; its lower edge straighter and bent down to inner margin before tornus.

New Guinea: Kapaur, Milne Bay (type), Humboldt Bay, Oetakwa River.

#### 10. Cacyparis rectilineata spec. nov.

Nearest to brevipennis; the line limiting the basal patch, which is olive-brown, concisely straight from one-third of costa to beyond middle of inner margin; the yellow area much broader and at termen running up nearly to apex; the brown subapical area mixed with some grey scales; the boss of inner margin small; the fringe pale, slightly lustrous, but without any lustrous scales at termen before it; hindwing deep yellow, with a slight grey subterminal cloud beyond cell.

Two specimens from Cedar Bay, Cooktown, Queensland (A. S. Meek); 1 ? from Mulgrave River, Cairns, February 1889 (Barnard).

# 11. Hyposcota aurata spec. nov.

Forewing olive grey-brown, with two faint dark spots in cell; costa golden yellow to middle, the costal edge throughout; the apex, tornal area, and termen narrowly between veins 2 and 4, with the fringe, golden yellow.——Hindwing and fringe golden yellow.

Underside of forewing blacker, the costa towards base marked with yellow; the yellow areas as on upper side in both wings, but in 3 hindwing with black spot below cell.

Face brown; vertex orange; tegulae orange laterally edged with olive fuscons, with metallic boss in middle; thorax grey; metathoracic tufts yellow with dark tips; abdomen yellow.

A series from Hainan.

# 12. Gabala australiata spec. nov.

Smaller than argentata, and superficially most like polyspilalis, from which it is separated at once by the absence of the fringes of hair on hindwing; but it is also distinguished, along with the following species, by having a yellow triangular spot on middle of costa instead of the oblong white patch of polyspilalis; the outer half of the wing beyond the basal patch is darker brown, especially along the basal, costal, and terminal pale markings; the black triangular marks less conspienous, and the area below them dappled with reddish white, which in the clearer examples takes the form of curved lines; hindwing yellowish, with the termen reddish from apex to vein 2.

2 ♂♂, 2 ♀♀ from Cedar Bay, Cooktown, Queensland (Meek).

# 13. Gabala quadrinigrata spec. nov.

Resembles the preceding, but the whole of the outer two-thirds of forewing is uniform dark snuff-coloured brown, with a faint reddish dot here and there; the basal area is followed on inner margin by an irregularly quadrate large black patch touching the cell; the silvery white spots representing the subbasal and inner lines

are large, but the middle one of the three of the inner line is smaller and yellowish, as in australiata, with which in all other respects it agrees.

1 & from Little Kei Island (H. Kühn).

#### 14. Gabala sanguinata spec. nov.

Forewing with basal area bright scarlet, containing numerous minute yellow dots and striae; the subbasal line a brown patch on costa with a curved line from it to median vein; the inner line represented by three small silvery white spots in a straight line; the rest of wing dark snuff-brown along the basal and costal markings, and narrowly along termen, the included quadrate space being dull crimson dappled with dull yellow; costa with a large yellow triangle at middle and four shallow lunnles before apex; the whitish spots in the subapical blotch reduced and narrow; the group before middle of termen represented by a single white dot; fringe yellow, very slightly marked with brown at apex, tornus, and vein 5.—Hindwing whitish at base, yellow in onter half, with some crimson scales along termen forming an undefined spot at the tail.

1 & from Java.

### 15. Gabala flavimargo spec. nov.

Resembles the preceding species sanguinata in baving the subbasal line represented by a curved brown mark from costa; the basal area is larger, formed of yellow spots with fine red reticulations, the outer three being large, the middle one yellowish and the two onter silvery white; the rest of the wing snuff-brown with rows of reddish yellow spots separated by waved brown lines and veins; a single white dot before termen at vein 5; fringe yellow, marked with brown at apex, tornns, and vein 5, the termen itself both above and below vein 5 being narrowly and irregularly yellow also; hindwing pale yellow, whiter at base; a reddish cloud on termen at end of vein 2 below the tail.

1 &, 1 ♀ from Dili, Timor, taken May 1892 by W. Doherty.

#### 16. Gabala hilaris spec. nov.

Agrees with the last species in having the termen of forewing narrowly yellow, as well as the fringe; but the ground-colour is much paler, being a mixture of pale brown, yellow, and pink; the basal area yellow, tinged and divided into spots by orange-red, the outer spots also yellow, more or less confluent and bounded by an orange-red line, followed on costa by the usual triangle and on inner margin by an isolated small round yellow spot; the brown area bounding the basal and costal markings is quite pale, followed by a broad area from inner margin to vein 6 of dull pink containing at top a small black dot; the termen itself is narrowly purplish red-brown before the yellow, and is preceded by an orange-yellow space traversed by orange-red lines; before the termen at vein 5 are two silvery white spots; the white spots of the subapical group are oblong, separated by orange-red scaling, and more or less confluent with the yellow costa: hindwing yellowish, with the termen flushed with pale orange-red above vein 2.

2 33 from Tambora, Sambawa; one, the type, from the low country, taken in April or May 1896, the other, between 2500 and 4000 ft., in June 1896, by W. Doherty.

#### 17. Gabala flavicosta spec. nov.

Forewing deep chocolate-brown, across which the course of the lines can be discerned, obscurely marked by dull blackish spots, costal edge broadly deep yellow, interrupted before and beyond middle by the brown ground; terminal area narrowly and the fringe deep yellow, uninterrupted at middle by a tooth of brown colour; basal area below the yellow costa filled in with deep crimson mixed with irregular whitish dots, containing on its outer edge between vein 1 and the cell-fold a large somewhat diamond shaped silvery white blotch; below the subapical yellow area and partially confinent with it are two round silvery white spots with a triangular one between them, the outer one with a white dot below it, preceded by a fine crimson line which runs past another silvery spot before the termen at vein 5.——Hindwing and fringe pale yellow.

Head, palpi, thorax, and patagia chocolate-brown; tegnlae red mixed with yellow, containing a small yellowish spot on their inner edge and a large silvery white one towards the outer; dorsum ochreons, with the middle line and basal tufts brown; venter and legs white; the tibiae yellow. Underside of wings yellowish, whitish basewards, the fringe deeper yellow; the dark area of forewing showing through.

1 \mathcal{P} from the Kumusi River, N.E. British New Gninea, low level, taken in August 1907 by A. S. Meek.

#### 18. Chaudica meeki spec. nov.

?. Differs from quadripennis in being redder brown with the yellow markings deeper; the lines more conspicuously red; the lobe at the end of veins 3, 4, 5 of hindwing rounded, instead of forming an angle; in the 3 the costa of hindwing reaches hardly to the middle of the inner margin of forewing, and curves into the termen gradually without forming an angle. The underside of hindwing wholly white, with long curling hair along costa and rough curved hair in terminal half down to submedian fold.

A series from near the Oetakwa River, Snow Mountains, Dutch New Guinea, up to 3500 ft., taken from October to December 1910 (A. S. Meek).

# 19. Chaudica schistipennis spec. nov.

3. Forewing brick-red, becoming purplish fuscous along the yellow costal markings, and red-brown along the terminal; the lines yellow.——Hindwing deeply cleft along the discal fold to end of cell; yellowish tinged with dull fulvous; on the underside the hairs of the upper lobe and at end of the cleft reddish, the rest pale yellow.

A &, minus the head, taken by W. Doherty, in Celebes, type. Smaller than the other species, with veins 3, 4, 5 of hindwing stalked, probably in both sexes; a \$\forall \text{ from Nias Island, at all events, exactly agreeing both in size and colour, has all three stalked.

#### 20. Chionomera peresa spec. nov.

Resembles pulchella in size and coloration, also in the markings, except that the large white conical central area is divided into two small conical blotches; one truncated from costa to median vein, the lower triangular on onter third of inner margin, its apex near he lower outer angle of the blotch above.

1 & from East Pegu, March and April 1890 (W. Doherty). This may be an abnormal specimen of pulchella.

# 21. Titulcia javensis spec. nov.

Forewing almost exactly like that of the 3 of argyroplaga both in 3 and 9; but the costa to inner line is fulvous brown; the yellow is tinged with olive; the large apical silvery subterminal patch is joined below middle by a silvery streak to tornus, beyond which from vein 3 to tornus the termen and fringe is olive-yellow, unchequered, and without black basal line.—Hindwing olive-brown in both sexes.

1 &, 1 ♀ from West Java.

# 22. Tyana magniplaga spec. nov.

3. Forewing dark green covered with minute paler striae; costal edge pale brown; basal patch flesh-colour edged with dark brown; at one-third of costa a large semi-elliptical flesh-coloured patch, thickly edged with red-brown; from lower end of cell an inwardly oblique flesh-coloured bar, formed of two blotches, the upper one large, stretching from discal to submedian fold, traversed by the base of veins 2 and 3, broadly edged with red-brown, the lower below the submedian fold an elongate oval; an interrupted irregular series of terminal flesh-coloured spots edged with red-brown, those above and below vein 5 coalescing; fringe pale pink.—Hindwing nearly pure white with the inner-marginal tuft slightly greybrown. Head, tegulae, patagia, and legs flesh-coloured; the diamond-shaped centre of thorax pale green; dorsum white suffused with fuscous grey; ? with the striae and reticulations deep yellow; the costal edge broadly dark snuff-brown, which is likewise the colour of the costal and subcellular blotches and of the terminal border which resembles in contour that of callichlora ?, with the subterminal dots fleshcolonr instead of white, and the anal area as dark as the rest; all the brown markings edged with yellowish; hindwing pure white. In another form of the & all the flesh-coloured blotches are larger, much paler, and edged with rust-colour instead of red-brown; the lower blotch of the series below cell not separate, but coalescent and forming part of one broad oblique blotch.

3 & 3 and 2 ? ?, all from Sikkim, 2 of the 3 & belonging to the aberration.

### 23. Tyana elongata spec. nov.

Forewing longer and narrower than in falcata, the costa arched from base to apex, the costal streak white, without dark dusting; apex more produced, so that the termen is more oblique and the anal angle decidedly obtuser; fringe with basal half pale, the outer half pinkish fawn-colour, the apex pink.——Hindwing white; occiput and base of tegulae tinged with yellow.

Antennae uniform pale, not annulated with dark.

Sikkim; a pair.

# 24. Tyana marina spec. nov.

Forewing deep sea-green, becoming pale yellow-green along the extreme termen; the fringe yellow-green; costal edge brown from base to apex; a dull brown spot from lower angle of cell to submedian fold; a white spot at base, and a few brown scales on inner margin near base.——Hindwing white; the tuft of hair in the fold of hindwing pink.

1 & from Kina Balu, Borneo.

#### 25. Earias brevipennis spec. nov.

Forewing yellow-green; the fringe concolorous.—Hindwing white, faintly greenish along termen below apex.

Underside of forewing paler green, with a patch of purplish brown scales along costa from base to middle; hindwing greener than above.

Head, thorax, and abdomen green; palpi and forelegs purplish-brown.

1 & from Batchian taken by W. Doherty in March 1892. Wings short and broad; the forewing strongly shouldered near base.

#### 26. Earias rufipes spec. nov.

3. Forewing yellow-green, pinkish yellow at base of costa; fringe olive green mixed with grey, the tips pale and shining; a minute brown dot at end of cell.——Hindwing and fringe white, with a very faint greenish tinge at termen from apex to middle. Underside of forewing quite pale green, of hindwing white tinged with green towards apex.

Face and thorax pale green, dorsum greyish white; antennae, sides of frons, palpi, and forelegs bright scarlet; the same size as pudicana Stand.

In the ? the palpi are much longer; the fringe of forewing concolorous.

4 & d, 1 ♀ from Kei Island, taken by H. Kühn in 1897 and 1898.

### 27. Earias venusta spec. nov.

Differs from roseifera in the rosy suffusion being ampler, extending from near base to the subterminal area along costa, which it touches, and reaching submedian fold in both sexes; fringe greenish, tinged with pinkish brown. Hindwing white, with a faint greenish tinge. The underside of both wings pale yellowish green.

Palpi dark brown; face either pale green, or green tinged with rosy, or wholly rosy; thorax greenish; abdomen grey.

1 & from Simla (type), and 2 ♀♀ and 1 & from the Khasia Hills.

#### 28. Earias apicebrunnea spec. nov.

3. Forewing pale yellow green; the costal edge from base to middle reddish; terminal area and inner margin deeper green; inner and outer lines marked by ferruginous brown spots on veins; the inner strongly incurved in cell; a diffuse reddish brown spot on discocellular, with a slight rusty suffusion to each line; subterminal line slightly darker green, obscure; fringe green, with a red-brown blotch at apex of wing.—Hindwing white, faintly green-tinged; in the ? the lines are often faint; the space between them suffused with rosy, this colour sometimes extending to base along cell and reaching inner margin on one hand and beyond outer line extending to apex; the discal spot faint; base of costa green; fringe and hindwing as in 3. Underside of both wings yellow-green; base of costa of forewing reddish in the 3; apex of forewing, as well as fringe, red-brown.

Palpi chocolate-brown; face and thorax pale green, both tinged with rosy in  $\mathfrak{I}$ , only the face in  $\mathfrak{I}$ ; dorsum whitish tinged with grey.

2 33, 3 ♀♀ from the Khasia Hills, Assam (type), and 1 ♂ from Sikkim.

#### 29. Earias venusta spec. nov.

Forewing pale green; the costa from base broadly rust-colour; a diffuse rust-coloured spot on discocellular; a small round green spot in cell; the lines darker

green; a median bent in cell; outer bent at veins 6 and 4; an obscure subterminal; termen deeper green; fringe violet-grey.—Hindwing white, tinged with very pale grey in  $\delta$ , darker in  $\mathfrak{P}$ ; the termen towards apex faintly greenish; the veins darker grey. Underside grey, darker in forewing than hindwing: both wings with a yellow-green apical patch, stronger in the  $\mathfrak{P}$ .

Palpi and antennae purplish brown; head and thorax pale green; abdomen white, the dorsum dark grev.

A pair from Momeit, Burma, Jnne 1890 (W. Doherty). In shape and appearance much resembling apicebrunnea Warr. from the Khasia Hills, but the fringe is different, and the lines green in both sexes, the ? without the rosy tinge. The last two species may be distinguished from roseifera Btlr. by the longer wings with pale green fringes.

### Parerastria gen. nov.

Tongue well developed; from smooth; palpi upturned, the second segment moderately scaled, the third short and smooth; antennae of 3 serrate, pubescent; the basal segment enlarged, with a slight tuft; head and thorax roughly scaled; metathorax slightly crested; dorsum smooth.——Forewing elongate triangular; the costa protuberant beyond middle; apex blunt; termen shallowly excised between 7 and 4, which is somewhat prominent, then oblique; the tornus with a strong tooth of scales; inner margin sinuate, incurved before the scale tooth; forewing with veins 7, 8, 9 stalked, 10 and 11 free, from the cell; 5 from just above 4 in both wings; in hindwing 3, 4 and 6, 7 from angles of cell.

Type: P. castaneata spec. nov.

#### 30. Parerastria castaneata spec. nov.

Forewing chestnut brown; the costa at base and the terminal area narrowly, white: inner line dark, oblique and straight from costa to submedian fold, then inwardly oblique to near base of inner margin; the costa spotted with brown before the protuberance; orbicular stigma a small annulus with brown outline; reniform large, somewhat oblique, with dark outline and brown centre; outer line oblique outwards to vein 7, then slightly lunulate-dentate, vertical to 4, incurved to submedian fold and again outcurved, followed by another dark line, and a brown band, of which the outer edge is lunulate-dentate; termen white, except at apex; a terminal line of dark grey lunules; fringe pale grey; the tooth of scales whitish with two black marks.——Hindwing whitish at base, becoming grey towards termen beyond a dark curved outer line.

Mackay, Queensland.

# 31. Chloroplaga pallida spec. nov.

Forewing greyish ochreous, thickly sprinkled with dark green scales; a dark green oblique costal patch at one-third connected with a curved green lumulate patch in cell; a small green costal patch at two-thirds; from these patches an inner vertically waved line and an outer sinuously curved line can be traced to inner margin, where they approximate; submarginal line starting from a green spot close before apex, formed of green spots or lumules between veins, indented on each fold and outcurved between, preceded by a pale ochreous band; fringe grey mottled with dark.——Hindwing in both sexes whitish towards base, straw yellow in outer

half, with a purple abbreviated outer and much-waved subterminal line; the terminal border deep purple-brown: fringe yellow mottled with brown.

Gunong Ijau, Perak, 2000-3000 ft., March 1898 (Butler). Type: Penang, Selangor. Both sexes are alike.

#### Homophlebia gen. nov.

Tongue present; from smooth; palpi upcurved in front of face; the second segment thickly scaled, the third porrect, pointed; antennae of  $\delta$  filiform, with very fine short bristles; thorax and abdomen smoothly scaled, without crests; abdomen of  $\delta$  elongate.—Forewing narrow, elongate, costa shouldered near base, the apex prominent; termen vertical or slightly incurved to vein 3, then hooked and obliquely incurved.—Hindwing with apex somewhat prominent; neuration as in Camptozada, a vein in each wing missing (? coincident).

Type: H. bilinea Swinh. (as Clethara).

### 32. Homophlebia xanthosoma spec. nov.

Differs from bilinea Swinh. in the dorsum and whole hindwing being yellow; the submarginal line and fringe above vein 2 grey; in the forewing the two lines are yellow, not white.

A single ? from Sumbawa.

#### 33. Gelastocera viridimacula spec. nov.

Forewing greyish ochreous speckled with black, and suffused with pale brown or fuscons; the basal area pale fulvous, containing a large green blotch at base reaching from costa to submedian fold, edged with white, and along costa underlined with red; inner line vertical, black inwardly edged with whitish, wavy and dentate; outer line black, irregularly crenulate, preceded by a brown median shade; subterminal line formed of black spots in the intervals; stigmata represented by a small spot and a large black one; terminal line black with small dots on it; fringe dark brown, but pale at anal angle.—Hindwing dull whitish, faintly tinged with rufous; black terminal dots in upper half of wing.

Penang and Gunong Ijau, Perak.

# 34. Mauritia pallidipennis spec. nov.

Forewing pale ochreous, sometimes with a faint reddish tinge; the lines grey, placed as in cervina.—Hindwing semihyaline pale luteous; like cervina, the discocellular is sometimes marked with a blackish lunule.

This pale form occurs in Sikkim (type) and in the N.-Chin Hills, Burma.

#### 35. Mauritia orthoscia spec. nov.

Forewing grey finely speckled with black; the costa narrowly rusty; the inner and outer lines thick and straight, slightly oblique outwards and parallel to each other; the inner preceded and the outer followed by a similar but fainter line; subterminal line of minute black speckles; cell-spot black on the outer line.—

Hindwing shining white, with a blackish border from apex to submedian fold before the white fringe.

Angabunga R., British New Guinea, 6500 ft., November 1904—February 1905 (A. S. Meek).

#### Lasionotella gen. nov.

Tongue well developed; from smooth; palpi upturned, the second segment thickly scaled, roughened in front, the third short and smooth, porrect; antennae of  $\delta$  pubescent; abdomen of  $\delta$  long, hirsute, especially the dorsum, with tufts of hair; the anal tufts large; forewing with costa slightly arched at base, then straight; apex well-marked; termen curved; the inner margin convex; hindwing with termen excised from vein 6 to 3, and from vein 1 to anal angle, the inner margin very short; the cell area very broad, the space below median contracted; a large foveal space on underside before termen between veins 5 and 3; the termen projecting at the end of veins 6, 7 and 2, 3; in forewing vein 6 from upper angle of cell; veins 7, 8 stalked, 9, 10 stalked, 9 anastomosing with 8; in hindwing vein 5 curved shortly upwards, veins 4 and 3 long-stalked.

Type: L. exesa spec. nov.

### 36. Lasionotella exesa spec. nov.

Forewing chalk-grey, slightly speckled with black; base of costa and a straight streak from one-third of costa to termen above anal angle green; lines dark, plain only at costa, more or less vertical and irregularly waved; the outer bent outwards below subcostal vein, then curved between veins, and followed by a dark diffuse cloud, paler in centre of wing; a slight flesh-coloured tinge in median area below cell, especially at base of veins 3 and 4; cell-spot black; subterminal line broad and pale, clearest at costa, where it is preceded and followed by three greenish black wedge-shaped spots with the veins across them pale; terminal area greyer; terminal spots brown; fringe whitish, slightly darker chequered.——Hindwing dull pink, paler and greyer basewards and along inner margin; fringe pinkish white.

Described from a single of from N. Borneo.

# Hypaenistis gen. nov.

Tongue present; from smooth, with a projecting tuft of hairs; palpi upturned, strong, the third segment short, porrect; antennae of & with tuberculate fascicles of cilia, the basal segment swollen; thorax and abdomen smooth; the abdomen very long and slender, with the anal tufts largely developed; forewing with areole, veins 8 and 9 anastomosing; hindwing with vein 5 absent,? coincident with 4.

Type: H. purpurea spec. nov.

# 37. Hypaenistis purpurea spec. nov.

Forewing dull olive with very obscure markings; the basal area and the terminal area darker; a bent broad median shade; two dull green, paler-edged spots on discocellular, conversely pear-shaped, the lower the larger; subterminal line lumulate-dentate, indistinct; fringe dark olive with minute white dots at base.——Hindwing deep vinous red, the costa pinker; termen and inner margin dark olive.

Vertex of head and tegulae white.

Choiseul Island, Solomons, January 1904 (A. S. Meek).

#### 38. Pterogonia cassidata spec. nov.

3. Forewing lilac-grey along inner margin and towards apex above vein 2, the rest of the wing suffused with red-brown and shagreened by pale and dark transverse striae; the lines pale outwardly edged with reddish; the inner oblique to median vein, then vertical to vein 1, then again oblique; the outer shortly angled ontwards at veins 8 and 4, and inwards on both folds; two or three subterminal black spots; the spot on discocellular as in *episcopalis* Swinh., but more rounded inwardly, edged with dark brown, with no black spot below lower end.

One & from Coorg, Mercara.

In this species the median vein and vein 1 are only slightly distorted; veins 6 and 7 slanting downwards to termen. In *episcopalis* veins 2 to 7 are all greatly distorted, the submedian fold being strongly marked beneath.

#### 39. Westermannia equina spec. nov.

Smaller than *columbina* Warr. (1914). The forewing paler grey; the dark spot in cell minute or absent; the median prolongation of the dark terminal shade reaching below vein 1 and bluntly rounded, its inner edge more vertically curved; the reniform stigma narrower, with a black spot above it and a white (or yellow) one below it; the figuration, roughly speaking, resembling the head of a horse.

Little Kei.

# 40. Westermannia interrupta spec. nov.

Forewing greyish brown, growing paler towards costa and termen; costal edge pale; inner margin from base of cell to three-quarters cream-colour, indented and often quite interrupted at a little before middle by the brown ground-colour; lines very obscure; the outer rather darker, outcurved and more or less parallel to termen; subterminal more indistinct; reniform stigma marked by a black dot at upper end and a white one at lower end of discocellular; fringe brown.—

Hindwing whitish washed with fuscous grey, diffusely darker along termen; the veins dark.

The ? is decidedly darker in both wings.

Solomons, from various islands, type from Florida, all collected by A. S. Meek.

### 41. Tympanistis rufimacula spec. nov.

Forewing grey, dusted with greenish grey, without the transverse strigulae; lines greenish grey, more concise; the inner bent outwards towards inner margin, the outer incurved below middle, approaching inner line on inner margin, followed by a feebler grey line; subterminal line formed of slightly connected spots, indented on each fold; cell-spot red; the inner margin at base, the basal half of submedian fold and a patch along vein 3 to subterminal line red.——Hindwing red, with costa pale ochreous.

Khasia Hills, Assam. Much smaller than testacea Moore; the scaling normal.

### 42. Dabareta tumidistigma spec. nov.

Distinguished from *chlorostigma* by the stigmata being dark green edged with whitish and much larger, especially the claviform, which sometimes extends below vein 1 and above coalesces with the orbicular.

Khasia Hills, Assam (type); Sikkim, Manipur, Burma. In the Sikkim specimen, a ?, in the British Museum collection (teste Hampson), the veins 3, 4 of hindwing are well stalked; in the four specimens in Tring Museum this is also the case in the 3 & 5 from the Khasias; in the ? from Manipur the stalking is not perceptible.

### 43. Didigua chalybea spec. nov.

Forewing dull lilac-grey; the lines and shadings rusty green; inner line indented below middle, excurved above and below, followed on inner margin by an oblong rusty brown patch; cell-spot linear, rusty brown; outer line waved, oblique, indented on each fold, followed by an indistinct shade of brown; subterminal line formed of dark spots below costa, that below 7 near termen, then by a fine lumulate-dentate brown line; some fine dark terminal lumules; fringe grey with white line at base.——Hindwing purple black, with a steely lustre; fringe grey with white line at base; underside of forewing black-green with a steely gloss, the margins lilac-grey.

1 & from Penungah, Borneo.

# 44. Didigua immemor spec. nov.

Smaller and greyer than *viridipicta*, with the markings much the same, but the green coloration almost obsolete; the slight amount left being overpowered by the grey suffusion; an oblong black blotch from the discal spot to outer line, absent in one specimen; the apex dark grey; hindwing grey.

From the Khasias.

# 45. Didigua mixticolor spec. nov.

Forewing pale whitish ochreous, dusted with rufous and olive scales; the base with slight green suffusion; inner line marked by a green spot on costa, oblique ontwards, strongly indented on submedian fold, rufous below middle; outer line pale, preceded by a dark greenish fuscous round blotch at end of cell and by a green line from costa, and below the cell by bright scarlet scales; edged outwardly by a somewhat deeper suffusion of green and rust-coloured scales; discal spot bright scarlet on the inner edge of the dark blotch; submarginal line pale, waved, indented on each fold, preceded and followed by green and reddish speckling, the green forming small spots; some grey-green linear streaks in the intervals from subterminal line to termen; fringe white rayed with rust-colour beyond veins.—

Hindwing luteous, becoming brick-red towards apex and termen; the inner margin grey; fringe rufous spotted with brown and tipped with white.

1 from Penang (type), and 1 ♂ with the markings plainer, without locality.

#### 46. Aiteta deminutiva spec. nov.

Q. Forewing fawn-grey, speckled with black; the costal edge finely ochreous; lines ferruginous, ill-marked; inner oblique from one-fourth of costa to middle of inner margin, indented on submedian fold; outer from middle of costa obliquely curved to before tornus; traces of a subterminal line formed of spots near costa; fringe in basal half mottled brown and black; in apical half pale.——Hindwing uniform grey; the fringe whitish, with a blackish line near base.

Underside of forewing dark grey; the costa ochreous, the apex pale grey beneath a black costal spot; fringe ochreous between veins 2 and 4; hindwing white.

Palpi, pectus, legs, and lower half of face whitish; head, thorax, and abdomen fawn-grey.

Quite the smallest species of the genus, expanding only 18 mm.

Vella Lavella, Solomon Islands, February—March 1908 (A. S. Meek), 2 ? ?.

#### 47. Aiteta albignesia spec. nov.

Smaller than *albicosta* (Beth.-Bak.), the ground-colour brown instead of grey, dusted with darker, and with the inner margin suffused with dark fuscous brown; hindwing white, the apical area fuscous grey, and the veins darker.

British New Guinea: Angabunga River (A. S. Meek).

# 48. Hylophilodes parallela spec. nov.

Forewing with the same silky ground-colour as in orientalis, but the median area always paler than the basal and terminal; the costal edge yellow-brown throughout; inner line as in orientalis, but generally slightly curved, concave outwards; a slight green cell-mark; outer line parallel to inner, from just beyond middle of inner margin to two-thirds of costa; subterminal line as in orientalis, but fainter, without white edging; fringe olive-yellow, with some red scales at apex of wing.——Hindwing and fringe pure white.

Underside pearly white; costa of forewing dusted with purplish; fringe at apex reddish, with three black dots.

Face and tegulae deep green; lower part of face and base of tegulae purplish; patagia whitish green; abdomen white, with yellow-green hairs at base in the  $\mathfrak{P}$ ; pectus and venter white; legs and palpi pinkish grey, tinged with brown.

1 &, 1 ♀ from the Khasia Hills, Assam.

### 49. Paracrama latimargo spec. nov.

Differs from dulcissima Wlk. in the terminal border of forewing beyond subterminal line being broader; the hindwing white for two-thirds, then with a rosy border with diffuse inner edge; the lines of forewing are yellow, instead of pale green.

Ninay Valley, Central Arfak Mts. (type), also from British New Guinea.

# 50. Paracrama angustimargo spec. nov.

Differs from *dulcissima* in the terminal border of forewing beyond subterminal line being narrower; the sinus touching the termen; the hindwing less suffused with rosy.

Ceylon; Belgaum, S. India.

#### 51. Carea confinis spec. nov.

Forewing bright rufous with dark irroration, denser, and forming shades in the  $\mathfrak P$ ; the costal edge red; inner line oblique, bent outwards shortly along median vein; outer twice excurved, indented on the folds; subterminal waved and angled; a diffuse dark shade oblique from towards bottom of inner line to top of outer in the  $\mathfrak P$  only; cell-spot black; in the  $\mathfrak P$  a dark shade before inner line and beyond the outer; fringe brownish red.—Hindwing white in basal half, orange-red in terminal, pale olive-grey along inner margin.

Khasia Hills, Assam.

#### 52. Carea cervina spec. nov.

Forewing fawn-colour, with darker irroration; the costal edge ochreous; lines very indistinct, darker grey; the inner, apparently, outcurved above and below the median vein; the outer scarcely visible; cell-spot black above a slight dark cloud; subterminal line angled and dentate; fringe dark grey; apex slightly produced; the termen slightly sinnous.——Hindwing dull reddish, the costa pale towards base, the inner margin grey below median.

Burma. Described from a single ♂.

#### 53. Carea minima spec. nov.

Forewing rufous, densely sprinkled with purplish-red scales, more or less obscuring the markings; the two lines dark, oblique and parallel; cell-spot small and black; subterminal diffuse and obscure; costal edge reddish.——Hindwing whitish towards base, orange in terminal area; the inner margin tinged with grey in 3.

Quite a small species.

Penang.

### 54. Carea sabulosa spec. nov.

Forewing rufous brown, thickly sprinkled with darker scales; the costal edge finely white: lines very obscure, purplish brown; the inner slightly oblique outwards, faintly waved; the outer inbent on both folds; subterminal line lunulate dentate; the veins towards termen a little lighter than the ground-colour; a dark cell-spot; fringe concolorous, the tips beyond veins 2, 3, and 4 white-dotted.—

Hindwing orange red above median vein and vein 2, below them olive-grey.

Sikkim and Assam.

### 55. Carea curtisi spec. nov.

Resembles sabulosa, but smaller and darker, more suffused with purplish; the inner line straight and oblique, not wavy; the orange of hindwing redder.

Penang (C. Curtis).

#### 56. Carea simplicilinea spec. nov.

Smaller than *flava* Beth.-Bak., with which it agrees in the main; but the black costal marks are almost obsolete near base, and the outer line runs straight from costa at four-fifths, or with a slight curve, to anal angle; the terminal area is narrower, the termen being less bulged; hindwing white at base and along inner margin, tinged with orange fulvous in outer half from apex to vein 1; the fringe dark.

Oetakwa River, Snow Mts., Dutch N. Guinea, up to 3000 ft. (A. S. Meek).

#### 57. Carea verticata spec. nov.

Forewing fawn-colour, dusted with olive fuscous, and with a slight rnfous tinge; lines olive, thick, vertical; inner slightly incurved, preceded by a whitish line and followed by olive suffusion; outer straight, slightly divergent, also preceded by a white line and with olive suffusion beyond it; subterminal line waved; a black cell-spot.——Hindwing dark olive fuscous.

A single & from Gunong Ijau, Perak.

#### 58. Carea trilineata spec. nov.

Forewing dull brownish fulvous, speckled with black; lines blackish; inner and outer nearly vertical on each side of the black cell-spot, the outer slightly bent below costa; submarginal line thicker, dentate, somewhat interrupted between 4 and 6; a diffuse dark cloud oblique from bottom of inner line to end of cell; fringe dark brown, marked with two white lunules at anal angle; in the ? with short white dashes at end of veins.——Hindwing orange reddish, paler towards base and costa, olive-grey along inner margin.

Khasia Hills, Assam.

#### 59. Carea diluta spec. nov.

Closely resembles trilineata, but is larger, more fulvous, and clouded with dark shades; hindwing paler, suffused all over with pale orange, the inner margin hardly grey. Underside of both wings pale ochreous, tinged with rufous along costa and termen, without dark speckling or white scales at apex of forewing; the disc of forewing not orange-red.

Thorax and patagia brighter fulvous.

Malay Peninsula: Rukit Putus (type), Gunong Ijan.

### 60. Carea undicostata spec. nov.

Forewing leaden grey, suffused from base to outer line with purple brown; lines darker, placed much as in varipes; before the outer line in the costal half of wing is a deep fulvous-brown cloud, narrowing downwards; an indistinct wavy dark subterminal shade; a dark spot at end of cell; fringe dark brown.——Hindwing dull orange-red; the inner margin and base olive-grey.

Underside of forewing brick-red, the costa and apex purplish grey; of hind-wing ochreous, with quite the outer apical half purplish grey speckled with black.

Head and thorax purple-brown; abdomen dorsally olive-fuscous, like inner margin of hindwings; venter, especially towards anus, bright red.

Superficially much resembles the  $\delta$  of tumida, but the apex of the forewing is bluntly but prominently produced.

1 ? from Kina Balu, North Borneo.

#### 61. Carea triguttata spec. nov.

Forewing lilac-grey, sometimes with a slight brownish tinge, especially beyond inner line towards inner margin; markings deep green; a triangular spot on costa near base; a drop-shaped blotch before one-third, from the apex of which the inner line runs oblique and straight to inner margin, very often obsolete; a large truncate blotch before apex from the middle of which the dark outer line runs vertical to inner margin, marked by darker dots on veins; this blotch is followed by a short white costal streak, the extreme costal edge being also white; a black spot at end of cell; fringe more or less brownish green, except at anal angle, where it is white.——Hindwing wholly deep brick-red.

Dutch New Guinea: Ninay Valley, Central Arfak Mts. Larger than costiplaga.

#### 62. Carea nicobarensis spec. nov.

3. Forewing violaceous pink, the shading olive-fulvous; inner line distinct, purplish edged outwardly with fulvous red; a short subbasal purplish line; outer line

double, purplish, the exterior arm very thin, starting from costa nearer apex than in tumida, preceded by a bright fulvous shading; subterminal line not marked; termen fulvous, with the fringe darker; the cell-dots minute.——Hindwing uniform brick-red, the inner margin slightly paler.

Agreeing in shape of forewing with tumida, but smaller and differently coloured.

Nicobar Islands.

# 63. Carea commixta spec. nov.

Forewing lilac-grey, speckled throughout with olive-green scales, except just before the inner and outer lines and the fringe; lines thick, deep olive-green, the inner somewhat outwards curved towards inner margin, the outer straight and oblique; two faint green spots in the cell rather close together; beyond the outer line there is a large diffuse olive-green costal blotch, the area below it slightly washed with pale violet; fringe deep olive-green, becoming white below vein 2.—

Hindwing brick-red with an orange tinge, the inner margin broadly olive-fuscous; fringe red, white at anal angle.

Underside of forewing brick-red, the costa pinkish grey with darker speckling, the termen dusted with black towards apex; hindwing pinkish ochreous, dusted with dark scales along costa and apical third, where the fringe is red.

Head and tegulae dark olive-green; patagia and thorax grey; abdomen grey ringed with green; the anal segment, venter, and hindtarsi ferruginous red.

1 \( \text{from near the Octakwa River, Snow Mts., Dutch New Guinea, up to } \) 3500 ft., October—December 1910 (A. S. Meek).

#### 64. Carea calva spec. nov.

Forewing pale brick-red or reddish ochreous; the inner and outer lines very faintly darker, the former at one-third straight and oblique, the latter at two-thirds slightly excurved from costa, then vertical; fringe purplish with a fine black line through it, white at anal angle; a slight dark cell-spot sometimes visible.——Hindwing clear pale brick-red, paler towards base.

Underside brick-red, both wings speckled with purplish towards apex; fringe of forewing purple.

Palpi purple-brown; head, thorax, and abdomen like wings; nearest to unipunctata Beth.-Baker from New Guinea.

Malacca: Gunong Ijau (type) and Selangor.

#### 65. Carea infundibulata spec. nov.

Forewing pale chestnut-brown with a slight violet sheen; the costal edge, the inner and outer lines, and a funnel-shaped shade along this last from costa yellowish olive-brown; cell-spot distinct, black; extreme termen red-brown; fringe dark brown, with a line of black scales at the tips below middle.——Hindwing pale ochreons yellow, deeper yellow along termen.

A single ? from Penang, Malay Peninsula. Smaller and darker than calva.

#### 66. Carea consimilis spec. nov.

Forewing glossy violet-grey tinged with rufous; the inner and outer lines olive-brown, oblique and parallel, the outer slightly bent on vein 6; the inner

preceded by an olive cloud on inner margin, the outer followed by a similar tinge as far as subterminal line, beyond which the termen is paler; fringe metallic greybrown; cell-spot small, black.——*Hindwing* whitish in basal area, tinged with orange-red terminally, the inner margin in 3 slightly grey-tinged.

Ramboekers, Tondano, Celebes.

### 67. Careades saturata spec. nov.

3. Forewing violet-grey washed with rufons, with very fine black speckling, especially towards apex; inner line olive, oblique with a slight indentation in cell to median vein, then curved and vertical, preceded by a faintly lustrous line; outer line blackish, shortly excurved below costa, otherwise straight and oblique from middle of costa to tornus, preceded by a fulvons band which thins ont to a point, and followed by a faintly lustrous line edged by a darker one; an irregular dark subterminal line; two dark spots in cell, often very faint.—Hindwing deep coppery red, the inner margin broadly fuscous.

 $\mathfrak{P}$  with a bright plum-coloured suffusion; a diffused red patch at base of inner margin (present also but less conspicuous in the  $\mathfrak{F}$ ); the lines redder; the inner oblique, the outer incurved below costa.

Another form of the 3 has the ground-colour lustrous lilac-grey, with olive-green suffusion, and no rufous tints whatever.

All three examples from the Oetakwa River, Dutch New Guinea (A. S. Meek).

#### 68. Careades collineata spec. nov.

Forewing pinkish fawn-colour, flushed with olive, and with a pale lustrons sheen in places, dusted finely throughout with dark; costa pale at base; lines deep olive, parallel; the inner, from one-fourth of costa to near middle of inner margin, oblique and slightly curved; the outer, from middle of costa to tornus, dark olive, followed by a lustrous line; subterminal line lustrous pinkish, preceded by a dark olive crenulate line from 6 to tornus; a large olive-green costal patch from before outer line to subterminal; a faint dark cell-spot.——Hindwing orange-red; fringe red to 2, then whitish; of inner margin reddish with the tips white.

A single of from Bougainville, Solomon Islands (A. S. Meek).

#### 69. Careades dissocia spec. nov.

3. Forewing like fulva, but more uniformly olive-green; the costa marked with silvery only at the rise of the two lines; two slight dark spots in cell.—
Hindwing wholly bright deep red; the red fringes of the legs enormous. ♀ quite different, fawn-grey with costal edge reddish; inner line dark oblique and slightly curved to middle of inner margin; outer line at two-thirds, slightly bent on subcostal, then vertical, separated by a pale line from a dark greyish-olive band, the irregular outer edge of which is followed by a broadly paler space before the darker olive shade along the termen; two dark spots in cell; hindwing bright orange-red; the fringes paler.

Eilanden River, S.E. Dutch New Guinea (type), also from Mt. Goliath, and Ninay Valley, Arfak Mts.

# 70. Careades plana spec. nov.

?. Fawn-colour washed with rufous as far as outer line, and finely dusted with black atoms; inner line represented only by a double patch of black scales at one-third of inner margin; outer line double, reddish, indistinct, vertical but slightly concave outwards, from one-fourth of costa to one-fourth of inner margin, like the inner line marked with black scales on inner margin; two slight dark spots in cell; a faint reddish tinge along termen; fringe concolorous, tipped with white at tornus; hindwing orange-red in terminal half, much paler basewards; fringe red from apex to vein 2, then white; inner margin slightly olive-grey, the fringe white.

A single ? from Cedar Bay, Cooktown, N. Queensland.

#### 71. Careades neglecta spec. nov.

3. Forewing pinkish or greyish fawn-colour, with olive-brown suffusion in basal area, along inner margin, and beyond outer line; a reddish blotch on inner margin near base, not always visible; markings much as in subrubra, but less heavy.—Hindwing coppery red, with the inner margin blackish fuscous; \$\pa\$ suffused with bright fulvous; the inner line obliquely curved to near middle of inner margin, the outer double, bent below costa, then incurved and vertical; subterminal line blacker and more complete than usual, interrupted only in the middle; a rufous patch on inner margin near base; some blackish scaling on inner margin at end of the lines.

Oetakwa River, S.E. Dutch New Guinea, up to 3000 ft., October—December 1910 (A. S. Meek), type; Ninay Valley, Central Arfak Mts., 3500 ft., November 1908—January 1909.

# 72. Careades approximata spec. nov.

Forewing purplish plum-colour; the lines fulvous; a fulvous patch on inner margin near base; inner line widely outcurved from quite one-third of costa to middle of inner margin; indistinctly double; outer line double; the inner arm oblique and diffuse from middle of costa to vein 8, then right-angled and slightly oblique outwards; the outer arm straight; in the right wing the line is indented on the cell-fold; subterminal line well expressed.——Hindwing more orange-red than coppery.

A single  $\mathfrak{P}$  from the Upper Setekwa River, S.E. Dutch New Guinea, September 1910 (A. S. Meek). It may be distinguished by the much narrower breadth of the median area between inner and outer lines.